

Descriptive Catalog

Spring of
1909

Presented to the L. H. Bailey Hortorium
by the Missouri Botanical Garden, 1972.

Linn County Nursery

SNYDER BROS.
— PROPRIETORS

Fruit Trees : Small Fruits
Evergreens & Ornamentals

CENTER POINT, IOWA

STATE OF IOWA
CERTIFICATE OF NURSERY INSPECTION

Office of State Entomologist, Ames, Iowa.

This is to Certify, That in accordance with Chapter 53 of the Acts of the Twenty-seventh General Assembly, as amended by the Thirty-first General Assembly, the nursery stock for sale by the Linn County Nursery, Snyder Bros., Props., of Center Point, Iowa, has been inspected by a duly authorized inspector and has been found apparently free from dangerously injurious insects and plant diseases.

This Certificate is invalid after July 1, 1909.

Certificate No. 157.

H. E. SUMMERS,

Dated Oct. 21, 1908.

State Entomologist.

SELECTION OF VARIETIES

A much more satisfactory selection of varieties can often be made after seeing them in the orchard. We have bearing trees or plants of most things described in this catalogue. The hospitality of the place is open to visitors and tree-lovers. Those in need of nursery stock are cordially invited to call and see us or correspond about their wants.

NURSERY STOCK NOT LISTED

We have a few trees of many things not listed in this catalogue; if what you want is not listed, write us. Information will be cheerfully given and descriptive catalogues mailed to all applicants.

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By Way of Introduction



WE TAKE pleasure in submitting herewith our descriptive catalogue and retail price list for the spring of 1909. We are grateful for the liberal patronage which we have enjoyed in the past, and return sincere thanks to our numerous customers, and we hope, with increased facilities and a complete line of stock of our own growing, to merit a continuance of the same. To those who have never dealt with us we extend a cordial invitation to get in line and let us try to help you on the way to produce the best fruit in the world—viz: **IOWA GROWN.**

Seventeen years ago we commenced the growing of nursery stock on less than one acre of ground here in Linn County. By honest dealing and an earnest endeavor to please our customers, we have been able to increase our planting year by year until now we have forty-five acres planted to trees, vines and plants for our increasing trade. While we have been building up our nurseries we have also been planting experimental orchards consisting in importance as in order named: Plum, Apple, Cherry, Peach and Pear, with various plantations of small fruits of

which we grow large quantities for market. Of those intending to purchase nursery stock we ask to make a careful examination of our descriptive list. It is based on practical experience and describes our stock truthfully, without confusing the buyer in announcing every variety as the best, offering only varieties that we know to be of value. If requested, we will gladly help you select varieties suited to your locality, or to aid you in any way with our experience in growing fruit for market. We have no secrets. Write us at any time.

IMPROVING BY SELECTION—We follow the old rule "like produces like," so endeavor to cut every bud and scion we use in propagating from young, vigorous, healthy trees that bear good annual crops of fine fruit. Careful experience has taught farmers that they must plant the best seed, if a profitable crop is expected. If propagating wood is cut from sickly and unfruitful trees, we must expect to grow trees like their parents. In every orchard are trees of the same variety which differ greatly; there are trees of Wealthy which have better crops of better colored fruit than do trees of the same variety in the same row. What causes this difference? The difference in the individuality of the trees, we believe, accounts for the difference in the habit of fruiting. This is the case in animal life. The Jersey is a good dairy breed of cows, and yet not every Jersey is a good cow. It is the individuality of horses which makes the get by one sire better than the get of another. It is this characteristic which makes improvement of breeds possible. Now, the best orchardists of the country are recognizing this difference in the individuality of trees. Nursery trees propagated from bearing trees of known value, which bear regular crops of good fruit, are sought after by the most thoughtful planters. Every farm boy early learns the trees in his father's orchard which bear the best fruit every year; the close observing boy often learns even the branch on that tree which bears the very choicest of fruit. Why not propagate from this tree and from this particular branch, and thus get other trees like it?

This is the work we are carrying on and our growing stock has been propagated from scions cut from selected trees. The time is coming when every one will appreciate the value of these trees; now is the time to start an orchard of this character.

Our shipping season usually begins early in April and continues as long as stock can be safely handled.

A Certificate of Nursery Inspection, certifying that our nurseries have been examined and found to be free from all insect pests, is attached to every order that leaves our nurseries.

Directions for Ordering

SHIPPING DIRECTIONS—Customers should always state whether stock is to be sent by Freight, Express or Mail, and by what route if there is a preference. In absence of instructions we use our best judgment. The necessary amount for postage must be included when stock is ordered mailed.

SIZE AND PRICE of stock should be carefully specified. All mistakes of ours will be corrected as soon as possible.

REMIT by P. O. Order on Center Point, Registered Letter, Bank Draft, Express Money Order or fractions of a dollar in stamps. Our terms are cash or satisfactory security in all cases before shipping to strangers.

FOR PACKING or Drayage there is no extra charge. We use the greatest care to have stock packed so it will reach its destination in the very best condition.

LOCATION—Our delivering grounds and headquarters are just south of the Rock Island Station in Center Point. Please bear this in mind when coming after stock, as no trees will be delivered at the farm as heretofore. At the new location we have erected a commodious packing shed and cellar, which is strictly up-to-date in every particular. This enables us to handle our stock in due season and in the best manner possible.

OUR STOCK is the best and largest we have ever had. It is the product of Iowa soil and thoroughly adapted to Iowa conditions. Our method of propagation is the most approved. Our apple trees are grafted with a long scion and a piece root so as to get the tree upon its own roots. Our plums are budded or grafted upon native seedlings; cherries are budded upon Mahaleb seedlings; and Peaches upon Bailey seedlings. In all cases we propagate only from select specimens of bearing trees.

OUR PRICES are not the lowest. It costs much more to grow trees here than farther south, where labor is cheap and the season long. It must be held in mind that the cost of the trees is not the cost of the orchard. The purchase of cheap trees often results in the loss of many dollars' worth of labor and the use of the ground for several years.

ORDER EARLY—That is the way to be sure of getting what you want. Every spring by delivering time our stock of certain things is entirely exhausted and they are out of the market. That may be the case with something you will want next spring; no one can foretell what will be first exhausted. Order early and we will save you what you want.

GUARANTY—We exercise great care to keep our varieties true to name, and are ready at any time to replace any stock that may prove untrue, or refund the amount paid for the same; but it is mutually agreed that we are not to be held liable for any amount greater than the original price of the goods.

CONDITION—We accept all orders on condition that they shall be void should any injury befall our stock from hail, frost, storm, fire or other causes over which we have no control.

Apples

No family need go without this most wholesome fruit, for any good corn soil within our state will produce them in abundance, if intelligently managed. Most other fruits are in condition to use only temporarily, but by making a judicious selection of summer, fall and winter varieties, one can provide himself with apples the whole year through.

COMMERCIAL ORCHARDING is in its infancy in Iowa. There are thousands of acres in our state upon which no more profitable investment could be made than to plant a commercial orchard. The enormous quantity of apples shipped into our state and consumed at a good price, ought to be incentive enough to those possessing suitable soil and location to embark upon such enterprise.

VARIETIES—In planting commercial orchards it is judicious to plant but few varieties and they should be selected with reference to securing the best pollination. It has been found from experience that large blocks planted to a single variety have been more or less barren. For a family orchard a few of the best sorts, if judiciously selected, are quite sufficient to afford a succession of fruit throughout the year for home and market.

SIZE TO PLANT—Persons selecting trees for transplanting will find it to their interest to choose small, thrifty trees two to three years old, and from four to seven feet high, as such are more safely transplanted, and with more satisfactory results than older and larger trees.

CROOKED TREES—People who want only straight, symmetrical trees should order only those described as upright growers. Many varieties are crooked and gnarly in the nursery although later they make nice, well proportioned trees. As a rule such varieties make the strongest and best orchard trees.

HOW PROPAGATED—Our apple trees are all two and three years old, grafted by the best approved method, with the end in view to produce the tree best adapted to withstand the rigors of this climate. They are grafted upon roots produced from the seed of the hardiest varieties grown in northern Vermont; we know these to be much harder than the ordinary commercial seedlings produced from the seed of the French crab; and as we use a long scion and plant the grafts very deep in nursery, leaving only the top bud above the surface, there is scarcely a tree to be found at digging time that has not roots of its own above the point of union of scion and root. Such trees will become entirely independent of the seedling root upon which they were grafted.

Prices on Apple Trees Will Be as Follows, Except Where Otherwise Noted:

	Each	Doz.	Per 50	Per 100
First class, 2 and 3 years, 5 to 7 feet.....	\$0.30	\$3.00	\$12.00	\$22.50
Medium, 2 and 3 years, 4 to 5 feet.....	.25	2.40	9.50	17.50
First class, 1 and 2 years, 3 to 4 feet.....	.20	1.80	7.00	12.00

Six at dozen, 25 at 50, and 50 at 100 rates; the above rates apply only when the quantity taken is of one variety; six of a variety at dozen rates, and lesser quantities at piece rates; orders for 25 to 50 trees containing a long list of varieties cannot be filled at 50 or 100 rates.

Select Summer Varieties

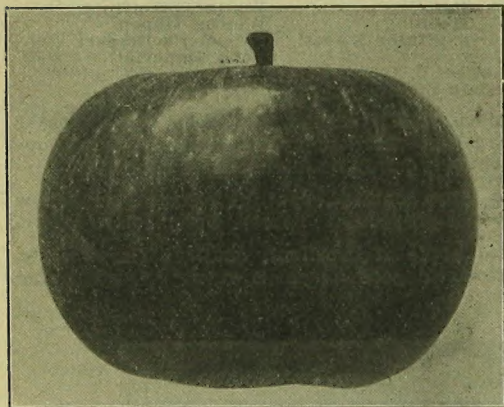
Beautiful Arcade
Benoni
Duchess
Early Colton

Liveland
Red June
Red Astrachan
Sweet June

Tetofsky
White Rubets
Yellow Transparent

BEAUTIFUL ARCADE—Tree an upright, pretty grower, very hardy, clean and healthy. A young and profuse bearer. Fruit of good size, almost colored with red in splashes and streaks. Flesh white, tender, juicy, sweet, very pleasant. Use dessert or cooking. Season last of August and September. One of the most desirable varieties for the North and Northwest.

BENONI—This old variety is still a great favorite for an early apple; they will bring a good price when other apples are a drug on the market. Tree vigorous, upright, spreading, hardy and productive; flesh yellow, juicy, tender, best for dessert. August.



Duchess of Oldenburg.

Keep in perfect condition longer than any early apple we have knowledge of. Tree a slow grower; early, regular and profuse bearer; very hardy; of Russian origin, rare and valuable.

DUCHESS OF OLDENBURG

—A hardy Russian variety; fruit of large size, flavor slightly sub-acid; indispensible in the north. One of the most desirable sorts for market or domestic use; last of August and September.

EARLY COLTON

—This new variety is much superior and ten days earlier than Early Harvest. Tree perfectly hardy, good grower, and abundant bearer. Flesh white, juicy and rich; best quality for cooking and eating.

LIVELAND

—This we obtained at our experiment station at Ames under the name Rubets, but we find several other nurseries are propagating it under the name Liveland Raspberry; no matter which is correct, it is our very best and earliest summer apple, will

Select Fall Apples

Anisim
Autumn Strawberry
Charlemoff
Chenango Strawberry
Dominie
Dyer
Early Melon
Fall Orange

Flora Belle
Hibernal
Irish Peach
Kaump
Longfield
None Such
Patten's Greening
Plum Cider

Red Bietigheimer
Silken Leaf
Snow
Sweet Newton Pippin
Utters Red
Wealthy
Wolf River

IRISH PEACH—A good tree, hardy and fruitful, a splendid dessert apple, whitish yellow, beautifully blushed next the sun; juicy, pleasant, acid, aromatic. Season just after Duchess.

LONGFIELD—Of Russian origin; perfectly hardy, a good grower and often begins bearing in the nursery rows at three years of age; is a regular and heavy bearer in orchard of most excellent fruit of fair size; flesh white, fine, tender and juicy, with a rich, sprightly sub-acid flavor. In the mountainous regions of the West, where the growing season is short, this is one of the very best winter apples. September and later.

PATTEN'S GREENING—A seedling of the Oldenburg and its equal as an orchard tree in hardiness and bearing; large, uniform in size, pleasant acid, good cooking, and the best for drying, having yielded the greatest number of pounds of dried fruit per bushel of any other variety. Season, September and October.

WEALTHY—A native of Minnesota, where it has proved hardy, vigorous and productive. Beautiful and excellent fruit. Flesh white, fine, sometimes stained with red; tender, juicy, vinous, lively, sub-acid. September to December. We most heartily recommend this variety.

FAMEUSE OR SNOW—Tree vigorous and productive, fruit small to medium, roundish, very handsome, deep crimson; flesh snow white, tender, juicy, high flavored and delicious. One of the finest dessert fruits. November and December.

Winter Apples

Akin's Red
Allen's Choice
American Blush
Arctic
Arkansas Beauty
Babbitt
Bailey Sweet
Baltimore Red
Ben Davis
Black Annette
Black Oxford
Bottle Greening
Boiken
Canada Baldwin
Collins Red (Champion)
Del. Red Winter
Eng. G. Russet
Gano
Greenville
Grimes' Golden
Hinkley

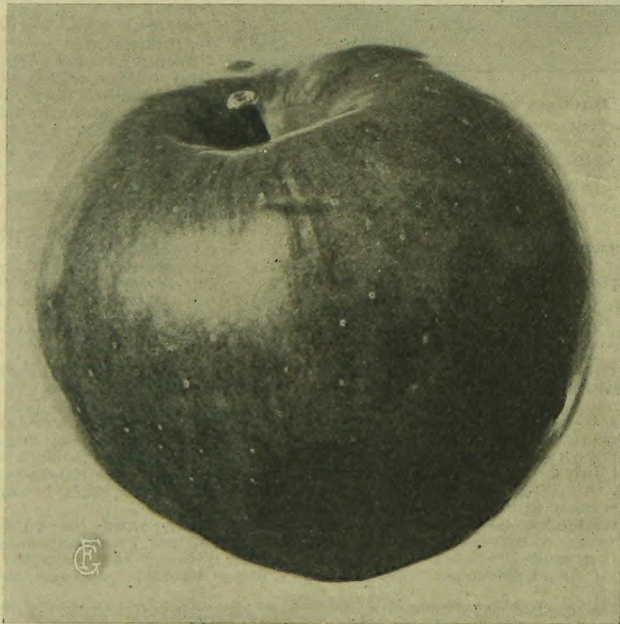
Iowa Blush
Isham Sweet
Isherwood
Jamison
Janet
Jonathan
Jordan
Lansingburg
Malinda
Mammoth Black Twig
Mann
McIntosh Red
Missouri Pippin
Nelson Sweet
Northern Spy
North Star
N. W. Greening
Paradise Winter Sweet
Peerless
Pewaukee
Ramsdell Sweet

Regan's Red
Repka Malenka
Roman Stem
Salome
Sheridan
Sheriff
Stayman Winesap
Talman Sweet
Walbridge
Wagener
White Pippin
Windsor
Willow Twig
Winter Banana
Winter Fameuse
Winter Streifling
Winter Queen
Weismer's Dessert
York Imperial

AKIN'S RED—Size and color much like Jonathan, but keep three months longer, quality even better than that excellent apple. Tree of strong, upright growth, and has proven entirely hardy as far north as Minnesota.

AMERICAN BLUSH—Medium to large, oblate, beautiful crimson on yellow skin, superlative quality, hardy and productive. Season, December to March.

ALLEN'S CHOICE—Medium sized apple of excellent quality; flesh white, stained with red, crisp, juicy, aromatic, good, keeps all winter. Tree a young bearer, good grower and hardy.



Gano

BLACK ANNETTE—A great favorite for home use. Tree of free, slender growth, very productive, will bear a peck of apples sooner than any other variety, three-year-old trees often bear in nursery, fruit of medium size,

WINTER APPLES—SELECT LIST—Continued

- striped with dark red on dull green, with numerous grey dots. Flesh greenish white, juicy, sub-acid, firm and one of the best keepers. Season, February to June and later. You will not be disappointed if you plant liberally of this variety.
- CANADA BALDWIN**—Tree hardy, thrifty, vigorous, upright grower, fruit handsome and of good quality; flesh white, fine, tender, juicy, refreshing, with a mild, sub-acid flavor; keeps all winter.
- COLLIN'S RED (Champion)**—A very valuable market apple of the Ben Davis type. Fruit very firm and will keep two months longer than the aforesaid variety. Tree a great drouth resister. a young, constant and heavy bearer.
- GANO**—Tree very healthy, vigorous, and hardy, having stood 32 degrees below zero unharmed. A rapid grower, large and spready, early annual and prolific bearer. Fruit large, red, without stripes. December to May.
- GREENVILLE**—Downing's Winter Maiden Blush, new, from seed of the popular Fall Maiden Blush, which it closely resembles in size, color, flavor and productiveness, but it is a better grower and keeps all winter. We have been growing it for several years and are well pleased with its behavior.
- GRIMES' GOLDEN**—Tree vigorous, reasonably hardy, upright, spreading, very productive, flesh yellow, rich, sprightly sub-acid, highly prized for its uniform regular annual crop. December and later.
- HINKLEY**—This is a long keeping winter apple, as hardy as Duchess; color mostly red splashed with yellow; above the average in size, and of splendid quality; this variety is being distributed under various names as follows: Lone Tree Seedling, Ideal and Legal Tender; all one and the same thing. It is a worthy variety and should be planted extensively.
- IOWA BLUSH**—One of the most valuable sorts for home use. Tree hardy and vigorous; a splendid dessert or cooking fruit. Fruit size of Janet and very handsome. Season, November to April.
- ISHERWOOD**—An Iowa Ironclad, upright, vigorous grower; very productive and valuable fruit large and handsome; flesh rich and excellent; season, late winter.
- MALINDA**—This is one of the hardiest of American varieties, a great favorite at the North. Tree of medium growth, spreading top. Fruit medium to large, sub-acid flavor. Season, January to May.
- NELSON SWEET**—A large, sweet apple that keeps all winter; color dark green. Tree a strong, free grower and hardy. Just the thing for those who like a real sweet apple.
- NORTH STAR**—This beautiful apple originated in the highlands of Aroostook County, Maine. Tree a strong, vigorous grower, entirely hardy and very productive. Fruit large and very best quality; color red on yellow; flesh yellow, tender, juicy, excellent flavor, core small. Season, December to April.
- NORTHWEST GREENING**—A good commercial variety, originated in Waupaca County, Wisconsin. A large, handsome green apple, changing to yellow when fully ripe. One of the best keepers yet produced. Quality very good. Tree a strong grower and very hardy; grows in favor each succeeding year. We strongly recommend this variety.
- PARADISE WINTER SWEET**—This is a productive and excellent orchard fruit; a great favorite with those who love sweet apples. Tree reasonably hardy, upright, vigorous, but not a very heavy bearer; smooth, yellow, fine appearing fruit.
- REGAN'S RED (Black Ben Davis)**—This is no doubt the most valuable commercial variety of the Ben Davis type; it is larger fruit and of a much deeper, darker color than the old variety, and some better in quality; for hardness the tree is about the same.
- REPKA MALENKA**—Of Russian origin. Tree extremely hardy, of upright growth; very prolific fruit of medium size, and one of the best keepers; color light yellow. almost covered with stripes and splashes of red. This tree will endure the climate of the extreme Northwest.
- ROMAN STEM**—A beautiful apple, medium to large; rich, pleasant, musky flavor; dessert. Tree hardy, a slender grower, regular bearer and reasonably productive. An old variety which continues to grow in favor; will keep all winter; very desirable for home use.
- SALOME**—Flesh whitish, yellow, fine, tender, mild, slightly aromatic, good; its hardness, long keeping, good quality, uniform size, retention of its flavor quite late, even into summer, will no doubt make it valuable for the West and Northwest. This variety is gradually but surely making its own way, and we regard it as one of the most valuable in our list.
- SHERIFF**—Tree vigorous and very hardy; one of the most satisfactory varieties yet planted in this section; fruit medium to large, usually highly colored; splendid quality; bears early and regular crops. Season, December to February.
- STAYMAN'S WINESAP**—Much superior to its parent—the old Winesap—in size, flavor, color and keeping qualities. Fruit large, bright red of best

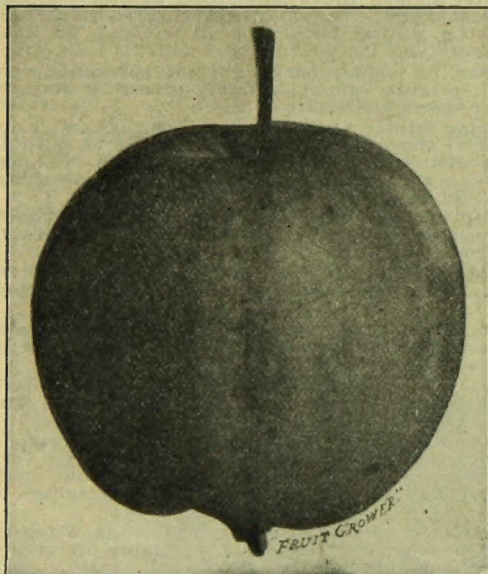
WINTER APPLES—SELECT LIST—Continued.

quality and a good keeper. Tree hardy, vigorous and very productive and a young bearer.

WINDSOR—Originated in Wisconsin, and grown in Iowa for eighteen years. Tree a free grower, smooth, well-formed, free of blight and entirely hardy. Season, December to March, as grown here.

WINTER SNOW—Here is an apple that for quality, flavor and texture of flesh is exactly like the common Fameuse. Fruit about the same size, but not near so highly colored, and will keep until spring. This is a great acquisition to lovers of the Snow apple. I have been grafting of this variety (sport, it might properly be called) from an old tree propagated by Prof. Budd many years ago, which is still thrifty and fruitful.

Select Crab Apples



A good assortment of these hardy and beautiful trees should be among first things planted. Are perfectly hardy and may be relied upon to furnish abundance of fruit suitable for a great variety of purposes. In our list of crabs are some of the finest. They are the special delight of the small boy. Don't allow him to go unsupplied. Plant them for the children.

Price of Crab Apple, except as otherwise noted, will be the same as for apple trees of same size.

List of varieties, with descriptions of a few of our leading varieties following. These can be furnished in all sizes, up to 5 to 7 feet, except as otherwise noted:

Alaska
Augustine
Briar Sweet
Excelsior
Florence
Gideon's Best
Gen. Grant
Golden Russet
Golden Beauty

Hyslop
Levi
Mercer
Martha
Quaker
North Field Beauty
Red Siberian
Soulard
Sweet Russet

Transcendant
Whitney No. 20
White Arctic
Wild Red Crab
Washington
Virginia
Yellow Siberian

EXCELSIOR CRAB—A beautiful new hardy variety, originated with Peter M. Gideon of Excelsior, Minn. It is a seedling of the famous Wealthy apple, which it resembles in quality, and is a strong, handsome growing tree. Ripens in early fall, a little later than the Duchess of Oldenberg; the handsomest, hardiest and best of our new crabs.

GENERAL GRANT CRAB—Tree an erect, vigorous and handsome grower; fruit in dense clusters; a regular and profuse bearer; quality good.

MARTHA CRAB—Said to be a seedling of Duchess of Oldenberg; resembles Transcendant in shape and size, but more beautifully colored; bears enormously, and so far has been perfectly free from blight; a model tree in every way; makes the finest jelly and sauce.

SOULARD CRAB—The largest of this class of apples (a native wild crab); very valuable as a cooking apple; when cooked a fine quince-like flavor; keeps very well until July. Tree very productive and hardy as any wild crab.

SWEET RUSSET CRAB—Fruit large, pale yellow, slightly covered with russet; flesh exceedingly rich and sweet; a delightful eating apple for the children. Tree slow grower, hardy and productive.

WHITNEY'S SEEDLING NO. 20—A valuable and beautiful crab. Tree very hardy; enormously productive and seldom fails to bear. The very finest grown for cider and excellent for jellies, etc.

SELECT CRAB APPLES—Continued

WILD RED CRAB—This is a novelty of recent introduction; it was found growing wild in Johnson County, this state. It is a cross of the wild crab upon one of our winter apples. Color, red. Fruit will average in size with Whitney No. 20. It has but little astringent properties of the wild crab, just enough to make it a good cooker and give it fully the most superb flavor; it will keep the year round in perfect condition, with only ordinary cellar storage. Tree as hardy as our native wild crab, and is a valuable tree for the home. The increasing demand for this tree is large; many buy it for the sweet fragrance of its bloom. 5 to 7 feet, 35c each.

No family should be without plenty of fruit for the home table and for canning—better have a little surplus than to go a little scant. Send us your order and you will soon have an abundance and to spare.

Select Pears

We believe the time is not far distant when the Iowa market will be supplied with home-grown pears. It is merely a matter of time for the selection of varieties suited to Iowa soil and conditions. The results of the last few years have been very encouraging. We do not advise one to plant pear trees extensively until he has found by trial that certain varieties are adapted to his location. Most varieties do best on bluff or clay soil, but Kieffer and Seckel are succeeding on a variety of soils. Only such varieties as are considered reasonably immune from blight are catalogued below. Blight is best controlled by cutting infected twigs a few inches below the infected portion and burning them before the disease spreads to others.

PRICE LIST OF PEAR TREES.

	Each	Ten	Per 50	Per 100
First class, 5 to 7 feet, 2 to 3 years.....	\$0.50	\$4.50	\$20.00	\$37.50
Medium, 4 to 5 feet, 2 to 3 years.....	.40	3.50	15.00	27.50

Varieties marked with a * can be furnished in dwarfs; these are budded upon quince roots, first class, caliper $\frac{3}{4}$ inch and up. Same price as first class standard.

The following list can be furnished in sizes as priced above. Will only describe a few of the leading varieties:

*Bartlett	Garber	*Howell
*Flemish Beauty	Golden Russet	
*Seckel	*Kieffer	Vermont Beauty
Sheldon	Krull	Worden Seckel
Snyder	Mt. Vernon	Wilder

GOLDEN RUSSET PEAR—This unique variety promises to be of great value in the south half of Iowa; its peculiar thick, leathery foliage renders it free from blight. It is proving a young and heavy bearer of fruit; above medium size and good quality.

GARBER—Rapid, vigorous grower; young bearer, hardy, productive. Fruit very large; excellent for canning. Season, September and October.

***KIEFFER'S HYBRID PEAR**—A cross between the Bartlett and Chinese Sand Pear. This has been so widely tested with favorable results that it is now regarded as a standard fruit; with us it has never shown any trace of blight. Fruit measures ten to twelve inches around; flesh white and firm, juicy and rich, with pleasant flavor and good quality. Will keep through November.

SECKEL—Tree is the healthiest and hardiest of all pear trees, bearing regular and abundant crops in clusters at the end of branches. Flesh whitish, buttery, very juicy and melting, with a peculiar rich, spicy flavor and aroma pronounced the richest and most exquisitely flavored variety known. Season here, September.

WORDEN SECKEL—This beautiful pear was originated by Mr. Sylvester Worden of Minetto, N. Y. A seedling of the Seckel and fully equal to its famous parent, which it most resembles in flavor and is equally as luscious, more juicy, and with an aroma equally as rich and inviting, while in size, color, form and appearance it is decidedly superior. Will endure any climate and is an enormous bearer. Ripens just after Seckel.

Hardy Peaches

The peach belt has gradually extended northward until it now includes Central Iowa. In spite of the extremely late freezes this last spring, which destroyed the most of the pear and native plum and somewhat shortened the apple crop, peaches endured it all and produced a full crop, this making their fourth successive crop.

We do not claim that peach trees are as hardy as plum and apple, but they have succeeded in living through our most severe winters. While they may be more or less injured by an occasional trying winter yet by proper pruning and cutting back they will outgrow their injuries and continue to bear profitable crops of fruit.

HARDY PEACHES—Continued

We believe if people will keep planting the hardier varieties, such as have originated here and in adjacent counties and continue to originate new varieties out of the seed produced by them, that the time is not far distant when we will be as certain of peach crops as we now are of plums and apples. We now have varieties that have stood the test for from twelve to seventy years. The original Friday, or as now called, Bailey peach pits were planted in Scott County in 1836 and two years later the trees were planted in orchard and were still living and producing good crops in 1896, having a record of three crops out of every five years for over sixty years. We have been growing these peaches here in Linn County for the past 16 years, with even a better record than the above, having produced four crops in succession. The following list is made up of varieties that have originated in Linn and adjacent counties. They are the most dependable varieties known among peaches for this section.

Our peach trees are budded upon the hardiest stock in existence, namely seedlings produced from native grown seed of the Bailey Peach. We plant them about a foot deeper than they stood in the nursery, so that if ever the tree is killed back to the ground it will throw up a sprout from above the bud union and thus renew the tree.

BAILEY—The Friday seedling or Bailey peach has a record of 70 years in Iowa, and an average of three crops out of every five years for this time. In Cedar County it has born heavy crops for many years in succession. Fruit medium size perfect free stone, small pit, white flesh, sweet and juicy. Season, first to middle of September. This variety reproduces true from seed. Get a dozen of these seedlings; they will produce fruit in two to three years. Nice stocky 2-foot trees, \$1.00; per dozen, 2½ feet and up, \$1.50 per dozen. See list below for budded trees.

LONE TREE—The original trees of this variety have stood twenty years in Johnson County, Iowa, without protection, having withstood 32 degrees below zero unharmed; has produced crops of fruit on an average of every other year for this time; fruit is medium size, large specimens having measured 8½ and 9 inches in circumference; color, yellow inside and out, without any blush; pit very small; ripens about September 10th. We regard this variety as most promising for success in Linn County. 4 to 6 feet, 35c; 4 to 5 feet, 30c.

LEIGH—This is of Linn County origin and has a great record for productiveness. The original tree produced eight measured bushels of fine fruit at one picking. Some one-year-old trees we sold four years ago produced three to four bushels of fruit this past season. Fruit large, fine specimens measure 10½ to 11½ inches in circumference and weigh 10½ ounces, handsomely blushed with white flesh, very sweet and juicy meat. Ripens last of August. Price, 4 to 5 feet, 30c; 3 to 4 feet, 25c.

WOLF'S LONE TREE SEEDLING—A seedling of the Lone Tree peach, its equal in size and quality with the addition of a bright red cheek, and ten days earlier in ripening. Tree fully as hardy as its parent and very productive. One of the most promising in our list. Price, 4 to 5 feet, 50c; 3 to 4 feet, 40c.

PIERPPOINT—A Linn County seedling of great promise and apparently harder than the average run of peaches. A large yellow free stone with red cheek and white flesh, juicy and of excellent quality. Pit very small. Ripe fore part of September. Price, 3 to 4 feet, 30c.

YOCUM'S CLING—A large, yellow cling stone with very marked suture. Vigorous and hardy. Middle of September. Price, 3 to 4 feet, 25c.

The following list of unnamed peaches, designated by No., originated with a Mr. Bednar of this county from a single seed. The one designated as No. 2 will hereafter be called Bednar:

B. NO. 1—A large greenish free stone, oblong and pointed. Flesh white, sweet and juicy. Last of September. This is a very valuable peach. Price, 3 to 4 feet, 30c.

BEDNAR (B. No. 2.)—A large oblong, yellow free stone of splendid quality. Tree hardy and very productive for four seasons past. One of the most valuable acquisitions to our peach list. Price 3 to 4 feet, 40c.

B. NO. 4—A very large, yellow free stone with bright red cheek. Price, 3 to 4 feet, 25c.

B. NO. 5—A large, green free stone. Thrifty, hardy and productive. Last of September. Price, 3 to 4 feet, 25c.

B. NO. 6—A large, yellow cling stone. September 15th. Price, 3 to 4 feet, 25c.

B. NO. 7—A large, late cling stone with a delicious flavor and fragrance, making it most excellent for culinary purposes. Flesh very firm and will keep almost like a winter apple. The latest peach in our list and the most valuable of the clings. Price, 3 to 4 feet, 30c.

PLUMS—Continued

originally found in the northwestern portion of the United States—Iowa and Minnesota, in particular. The varieties belonging to this group are the hardiest in tree and bud of anything in the plum line.

American or Native Group

The following list can be furnished in sizes as priced above. Will only describe a few of the leading varieties.

Beatty	Forest Garden	Snyder
Champion	Golden Queen	Stoddard
DeSoto	Hawkeye	Wolf
Edens DeSoto Seed	Hunt	Wyant
Cheney	New Ulm	

BEATTY—This plum originated in Benton County, Iowa, and bears the name of its originator. A beautiful, upright tree, with the best of foliage; hardy and thrifty. Fruit large to very large, beautifully colored, transparent yellow, blushed with red. Quality as good as DeSoto for any purpose. This plum combines more good qualities than any we have yet fruited. Season, last of August.

DE SOTO—Here is our old stand-by. To this we can compare everything else as a standard of quality. They are as good as peaches when canned and one will not tire of them so soon. Its only fault is overbearing—should be thinned for best results. Cultivate or mulch this variety and pick off fully one-half the fruit soon after it has set and you will be richly rewarded. Medium to large; vary in color from yellow to purplish red. Season, middle to last of August.

GOLDEN QUEEN—Fruit large, oblong, bright golden yellow. Delicious quality; unexcelled for culinary and dessert use. Season, last of August.

HAWKEYE—Large to very large; roundish, oblong; thick skin; a little coarse in flesh, rather firm; grayish purple. Tree of spreading habit, inclined to droop; hardy and productive. Season, last of August. Many call it the best plum in cultivation.

SNYDER—Originated by J. H. Fairchilds, Linn County, Iowa. This has proved to be the most productive large plum of good quality we have yet tested; will carry the heaviest crop of uniformly large fruit of any variety we have seen. Tree a strong grower, with the best foliage.

WYANT—The best dessert plum among the natives. Peel and serve with cream and sugar is their place, or to eat out of hand fresh from the tree; however, many think it is one of the best for canning also; develops too much acid in cooking to suit for that purpose; thick skin, which peels readily, leaving a toothsome morsel, which is sure to call for more; freestone; purplish red; large, round, oblong; very prolific and extremely hardy.

Miner Group

The varieties comprising this group are all comparatively late in ripening, about as hardy of those of the American group, and uniformly productive of large, beautiful colored fruit of best quality. They are nearly all self-sterile, but the kinds effectually pollinate each other, if thoroughly mixed when planted in the orchard. As there is little difference in the time of blossoming, plant a tree of one variety and then another, and so on, mixing the different varieties as much as possible; then you will be assured of perfect pollination.

MINER—This is an old standard variety, almost too well known to need description. Many regard it as a shy bearer, which is due to lack of proper pollination. When planted in an orchard among many other varieties it bears regular and very heavy; large, round, dull red; clingstone; late and profitable.

SURPRISE—A large red plum, excellent for dessert or market; very prolific, bearing immense crops of large plums on very small trees; flesh rich, sugary, delicious flavor; tree vigorous and hardy; desirable for the Northwest.

Wild Goose Group

This we regard as the commercial group of the native plums. It is safe to say that there are three times as much fruit of this group grown and sold as of all other natives combined. At three cents per quart orchards within fifty miles of a market will yield a handsome profit. The varieties listed in this group can be relied upon to produce easily 15,000 quarts per acre, not every year, but say three out of five. The varieties of this group are not as a rule quite so hardy as varieties of other groups, and for that reason would not advise to plant them beyond if quite to the north line of this state.

WHITAKER—Large, round, oblong; red; clingstone; the earliest good plum in our list; very productive; only a few days later than Milton, which variety is the first to make its appearance on the market. This we have discarded because of its poor quality—and we can afford to wait a few days longer for fruit which will be good when we get it. So for the early plum we advise to plant the Whitaker; it is one of the most profitable orchard varieties, and we consider it the best pollinator in our list for Charles Downing.

DOWNING (CHAS.)—This was originated here in Iowa from seed of Wild Goose. Fruit large, round, red, clingstone of unusual good quality; should be planted alternately with Newman or Whitaker for best results. Its bright cranberry color, thin skin, firm flesh, delicious flavor and its long keeping qualities recommend it to the market grower.

PLUMS—Continued.

WYCKOFF—This plum does not strictly belong to this group, but is difficult to locate. The fruit is especially adapted for canning purposes, as it makes sauce of unusually fine quality; its thin skin almost disappears upon cooking and leaves none of that bitter or astringent taste common in many other varieties. The fruit is above medium size, of beautiful light red color.

DUNLAP—This variety fruited for us first last year. The fruit is of excellent quality; large, round, inclined to be oblong; bright red, clingstone; follows after Wild Goose in season; a desirable variety.

MRS. CLEVELAND—The largest of the group; oblong, red, cling. Ripens just after Wild Goose; productive; an excellent variety. Tree a strong grower.

Tri Flora Group (Japan)

The varieties of this numerous family, which we consider worthy to be retained in the orchard are very limited. The reason we retain any of them is on account of their superior quality of fruit and great productiveness. In point of hardness and other characteristics of tree none of them can be very highly recommended. We will continue to propagate a few of the best varieties, which we list below.

BURBANK—Large, oblong, slightly conical, marbled and overspread with red; clingstone; season, middle to last of August; the most profitable of this group; flesh deep yellow, very sweet, with a peculiar and agreeable flavor. 5 to 7 feet and 4 to 5 feet.



Burbank

ABUNDANCE—This very closely resembles Sweet Botan in quality of fruit, also in shape and size, the principal difference being in the color of fruit and some slight variation in tree; if anything, the preceding variety is a little harder in tree. The best way to grow this is to top-work it into limbs of some good, hardy native, and then you can produce an abundance of most excellent fruit. 5 to 7 and 4

to 5 feet.

RED JUNE—The best plum of its season; in fact, it has no competitor, it being the first to ripen; gets ripe with the raspberries in fore part of July. Flesh light yellow, partially clinging to the seed; firm and moderately juicy, of good quality and large size; color red; tree hardy and productive.

Domestica Group

This family embraces the European varieties of plums and prunes. This season's experience with this class of fruit makes one wish for an orchard devoted entirely to such varieties. However, such an undertaking would not prove to be profitable unless intelligently managed. They must be sprayed regularly to prevent the curculio from destroying the crop. If it were not for this pest this class of plums, including prunes, could be as easily and profitably produced as any of the common natives, and of late it is in fact a serious question if it will be a profitable undertaking to try to grow the common natives without also preparing to spray regularly. Once we succeed in bringing a crop of these garden plums, as they are sometimes called, to maturity, there is greater satisfaction to be derived from the various uses to which they can be applied than from any other class of plums. Many of them are most delicious dessert fruits, some are unexcelled for culinary use and several make excellent prunes when properly cured. We submit a short list of the best of this class for this season.

RICHLAND—Tree upright, vigorous and hardy; fruit prune shaped, with very marked suture, medium to large; covered with a heavy bloom underneath, which is coppery color, tinged with blue; flesh greenish yellow; juicy, sugary, and freestone; very heavy bearer. A very fine fruit for dessert or culinary use, and makes an excellent prune when cured. 5 to 7, 4 to 5 and 3 to 4 feet.

DOMESTICA GROUP—Continued

COMMUNIA—Introduced by the Communia Colony of Northeast Iowa. A fine grower, with large, perfect foliage, and is an early and continuous bearer of quite large blue fruit, with much bloom; a fine fruit for culinary use or dessert; should be in every garden. 5 to 7, 4 to 5 and 3 to 4 feet.

SPANISH KING—Tree very vigorous and hardy, a young and heavy bearer. Flesh deep yellow, juicy, pleasant and sweet. Ripens middle of August. This plum makes an excellent prune when properly cured. Of all the plums in our orchard none are more productive or profitable, and few surpass it in quality; canned for winter use none suit our taste any better. 5 to 7, 4 to 5, and 3 to 4 feet.

TATGE—A seedling originated at Belle Plaine, Iowa, some twenty-five years ago; bears the name of its originator; has stood all the test winters unharmed. It is a fine grower, an early and profuse bearer; fruit large, dark blue, of splendid quality; makes a fine prune, properly cured. 5 to 7 and 4 to 5 feet.

BLUE MOLDOVKA—Here is a fruit which has been a great delight to me this season. I do love to eat those great, big, luscious, melting fellows; freestone; large, blue, with light suture; imported from Russia; perfectly hardy; very desirable. 5 to 6, 4 to 5 and 3 to 4 feet.



German Prune.

GERMAN PRUNE—This is one of the best of the prune family, of fine quality for dessert use, and especially esteemed for drying and preserving; abundant bearer; flesh firm, sweet and pleasant; freestone. Tree not so hardy as other varieties of this group, and should not be planted much north of here. 5 and 6 feet only.

DAMSON (BLUE)—This is the little, old-fashioned Blue Damson; some way people from the East, especially, won't forget this little thing. They make good pies, and they are prolific and have done well in this section for a long time; not strictly hardy, but people will have it anyway. 5 to 6, 4 to 5, 3 to 4 feet.

REINE CLAUDE—This is very short jointed tree, of spreading, rather dwarfish habit. It is an abundant and regular bearer; flesh pale green, extremely melting and juicy, and separates freely from the stone. Fruit above medium size, greenish yellow and ripens middle of August. 5 to 7 and 4 to 5 feet.

DOMESTICA GROUP—Continued

SHIPPERS' PRIDE—A large plum, very hardy and productive and possessing remarkable qualities for market. The flavor is fine and altogether it is one of the greatest acquisitions to the list of plums we have had in many years. Dark blue in color and ripens latter part of August. 5 to 7 and 4 to 5 feet.

DEATON—Large pale green fruit, with a heavy white bloom. Unsurpassed in quality for either dessert or culinary use; freestone; ripens last of August. Tree of Domestica type and will thrive where other European plums do well. 5 to 7 feet, 60c each; 4 to 5 feet, 50c each; 3 to 4 feet, 40c each.

FRENCH DAMSON—Above medium size, with very marked suture; dark blue. Ripens early in September. A splendid, luscious fruit for either dessert or culinary use. Tree perfectly hardy and prolific. 5 to 6, 4 to 5 and 3 to 4 feet.

UNGARNISHED PRUNE—A low, spreading tree that is proving to be very valuable in our orchard. Fruit of large size, with a deep suture, dark blue, with much bloom; is prune shaped; a perfect freestone, and of very high quality when fully ripe, but if tested when it first colors is very sour. Wait until they are soft and mellow, then they have the quality and flavor of the Italian prunells; not a young bearer, but are productive when it gets at it. 5 to 7, 4 to 5, 3 to 4 and 2 to 3 feet.

Hybrid Group

Along this line, our list is rapidly increasing, and promises to be very interesting in the future, and we hope profitable. Out of the many hybrids making their appearance at the present time, we have to believe something will evolve which will prove a great boon to the fruit-grower.

COMPASS—A hybrid of Miner plum and Sand Cherry; originated in Minnesota, and is in great demand for planting in the Northwest. Unsurpassed in hardiness, a wonderfully thrifty, healthy, clean growing tree; bears profusely at two years old; fruit small, purplish red; quality very fine for culinary use. Price, 5 to 7 feet, 50c each; one-year switches, 2 to 3 feet, 30c each.

WAUGH—A cross of Chabot and Wayland. Fruit high flavored, deep dark red and very large, covered with a light bloom. With the exception of Gonzales, this fruit made the finest appearance of anything produced in our orchard this past season. Tree vigorous and a heavy bearer. 3 to 4 ft., 35c.

GOLD (Robinson and Botan Hybrid)—I fruited this variety this past season, and must say we are well pleased with its behavior. It is a very large plum, of delicious, juicy sweetness; light golden yellow, changing to light cherry red when dead ripe. Reasonably hardy and seems to succeed in all parts of the country. 4 to 5 and 3 to 4 feet.

AMERICA (Robinson and Botan)—There has been nothing produced in my orchard that has attracted more attention than this variety; very large and prolific; not surpassed in beauty by any plum; flesh moderately firm and delicious; tree vigorous and hardy. 5 to 6 and 4 to 5 feet.

Select Cherries

Of recent years this fruit has been in greater demand than any other line of fruit, and probably will continue to be so for years to come. Those engaged in fruit growing on favorable soils will do well to plant liberally of this fruit. Cherry trees are, as a rule, short lived. They actually bear themselves to death. Cherries will thrive on any good, well drained upland. We have quite a number of new varieties on trial and in due time doubtless will have something good to offer. The following described varieties we have found to be the best out of a long list we have tried.

In wet seasons the last three varieties of our list are subject to leaf diseases; therefore should only be planted on high, well drained land and in excessively moist seasons be frequently sprayed with bordeaux mixture to prevent the development of any leaf disease. Where these varieties can be successfully grown they produce the most saleable and best fruit of any in the list.

Price List of Cherry Trees, Except as Noted Otherwise

	Each	Ten	Per 50	Per 100
First-class, 2 year, 5 to 6 feet.....	.50	\$4.50	\$20.00	\$37.50
First-class, 2 year, 4 to 5 feet.....	.40	3.50	15.00	27.50
First-class, 1 year, 3 to 4 feet.....	.30	3.00	10.00	18.00
First-class, 1 year, 2 to 3 feet.....	.20	2.00	8.00	15.00

Five at ten, 25 at 50 and 50 at 100 rates; the above rates to apply only when the quantity taken is of one variety; orders for 25 or 50 trees containing a long list of varieties cannot be filled at 50 and 100 rates.

CHERRIES—Continued

EARLY RICHMOND—Ripens latter part of June. Color red; quality acid, valuable for cooking early in season. Tree hardy and a regular bearer. 5 to 6, 4 to 5, 3 to 4 and 2 to 3 feet.

MONTMORENCY—Tree very hardy, immensely productive; fruit very large, flesh firm and meaty; much superior to Richmond for canning; the most profitable cherry to plant for market; has borne eight full crops in succession here in our orchard. Color bright, clear red; two weeks later than Richmond. 5 to 6, 3 to 4 and 2 to 3 feet.



Montmorency

DYEHOUSE—Medium size; rich, juicy and of good quality when fully ripe; very productive, a little earlier than Richmond. Has become a standard variety. 5 to 6 and 4 to 5 feet.

BALDWIN—A very promising variety of the Morello type; a vigorous, healthy tree; with thick rugose leaves, very resistant to leaf diseases. Fruit round, dark red, medium size, small stone, quality good. 5 to 6 and 4 to 5 feet.

WRAGG—This is a sturdy grower and an immense bearer of large, handsome, dark colored fruit, which ripens early in July. A fine, healthy, hardy tree. 5 to 6, 4 to 5 and 3 to 4 feet.

OSTHEIM—A hardy cherry, imported from Russia. It has been tested extensively in the Mississippi Valley and has proven to be perfectly hardy. Fruit large, roundish, oblate. Flesh liver color, tender, juicy, mild, sub-acid, almost sweet; very good. The king of all good cherries of the Morello class. 5 to 6 and 4 to 5 feet.

ENGLISH MORELLO—Medium to large; blackish red; rich, acid, juicy and good; one of the best in our list; very productive; tree a moderate grower; season, July. 5 to 6, 4 to 5 and 3 to 4 feet.

For Compass Cherry, see Hybrid Plums.

Select Grapes

The grape is one of the most highly prized, as well as one of the most wholesome fruits, and it is adapted in some of its varieties to nearly all portions of the country, and with a little care and attention can be raised on every farm and in every garden. It can be grown by any one who has a garden, a yard or a wall; can be confined to a stake, tied to a trellis, trained over an arbor, or allowed to cover a tree or building. Generally the vines do best trained on a trellis, and where the winters are severe they should be pruned in the fall, laid down and covered with soil. The grape should be planted on well-drained land. They will not thrive over a cold, wet and stiff subsoil. Prepare the land in which to set grapes by plowing and subsoiling just as deep as the tools can be run. Then dig big holes in which the roots can spread out without crossing or doubling them up. Any good, ordinary farm land will produce fine grapes in Iowa. Eight feet apart each way is a very good distance to set them; six by eight will do, but more is better. Cut



Concord

back to two buds the first year and rub off all others as they appear. The first autumn, cut back to four or six buds and cover the vine with earth. Let two canes grow the second year, and in the autumn cut one of them back to three buds and the other to the length of about four feet to bear. This severe pruning gives them a strong root before allowing them to bear. Give them thorough, clean surface cultivation and you will be richly rewarded.

CONCORD—Black—This has been for many years the grape for general planting. Bunch and berry large. Medium early. Vine very hardy and healthy. 10c each; 90c per dozen; \$7.00 per 100, 2 year No. 1.

SELECT GRAPES—Continued

DELAWARE—A noble variety; in quality most exquisite; does well here if given a little winter protection. Bunch and berry quite small, but of most beautiful, compact form. Color light red; very sweet, juicy and highly flavored. This is considered one of the best, if not the best American grape. 10c each; \$1.00 per dozen; 2 year-No. 1.

MOORE'S EARLY—Black—This is very valuable. Growing in favor each year. One of the most profitable for market. Two or three weeks earlier than Concord. Bunch medium. Berries larger than Concord. Should be in every garden. 15c each; \$1.50 per dozen; \$10.00 per 100.

CAMPBELL'S EARLY—This much lauded grape does not adapt itself to the conditions prevailing in our vineyard; such varieties as Moore's Early, Worden and Concord occupying rows alongside of it, receiving the same care, are more than one hundred times more profitable; in fact, it has not (and is making strong promises not to do so), yet paid the original cost of the vines. 2-year No. 1, 25c each; \$2.75 per dozen.

AGAWAM—Fine, large, red, borne in clusters of good size; excellent quality, aromatic flavor, peculiar to this variety. Strong growing vine and very productive. Should have winter protection in this locality. 10c each, \$1.00 per dozen; \$8.00 per 100; 2-year No. 1.

BRIGHTON—Dark Red—One of the most desirable of the early red grapes. Should be planted near other varieties, as its blossoms do not always fertilize when alone. This variety should have winter protection. 10c each; \$1.00 per dozen; \$3.00 per 100; 2-year No. 1.

MOORE'S DIAMOND—This new grape has evidently come to stay. Color white; berries large, with whitish bloom; skin thin; flesh melting, juicy and sweet to the center. Vine a strong grower and abundant bearer; healthy and very hardy. 10c each; \$1.00 per dozen; \$8.00 per 100; 2-year No. 1.

WORDEN—The best of all black grapes, and the most productive and satisfactory of all varieties. A strong grower, heavy yielder; healthy foliage; of excellent quality, ripening early. It should be the first to be selected in making a garden selection. 10c each; \$1.00 per dozen; \$7.50 per 100.

WYOMING RED—One of the earliest red grapes. Bunch and berry rather small. Vine healthy, hardy and moderately vigorous. Very productive; sweet and desirable. 2-year No. 1, 10c each; \$1.00 per dozen; \$8.00 per 100.

WOODRUFF RED—Very large and handsome. Color, red; strong grower; very healthy and hardy. Pronounced delicious by good judges. A few days later than Concord. 2-year No. 1, 25c each; \$2.75 per dozen; \$16.00 per 100.

POCKLINGTON—White—Very large and showy. Vine very hardy and vigorous. Bunch and berry large. Ripens about with Concord and is better in quality. 10c each; \$1.00 per dozen; \$8.00 per 100; 2-year No. 1.

NIAGARA—White—Quality about like (and ripens soon after) Concord. 10c each; \$1.00 per dozen; \$8.00 per 100; 2-year No. 1.

Write for Prices on Other Varieties of Grapes.

Select Currants

Currants should be planted in good, very fertile soil, with liberal manuring, and the tops should be cut back nearly to the crown, allowing only three or four canes to grow the first year. Plant in rows five or six feet apart and three feet in the row. Prune more or less every year to get rid of the old wood and keep the bushes open. Currant worms should be vigilantly looked for in spring and summer. These worms can be destroyed by white hellebore, one ounce to three gallons of water, and apply with a sprinkling can. Be sure and use the remedy as soon as or before the worms appear. The currant is well adapted to our soil and climate, and everyone should have a liberal supply. Also see spraying bulletin, page 41, for additional remedies to destroy the currant worm.



Perfection

PERFECTION—A cross between Fay's and White Grape, retaining the valuable characteristics of both parents. Beautiful bright red, as large or larger than Fay's, holding its size to the end of the bunch; easy to pick; a

SELECT CURRANTS—Continued

great bearer, superior to any other sort; less acid and better quality than any other large currant in cultivation. Large, healthy foliage, intermediate in growth between Fay's and White Grape. Kept well fertilized and cultivated they will regularly produce heavy crops of extra large fruit of the very best quality. Price, 25c each; \$2.75 per dozen; 2-year No. 1.

VICTORIA—This is a standard, very good and reliable currant, and will suit everybody. Very large, bright red; bunch is very long, very productive. 10c each; \$1.00 per dozen; \$8.00 per 100.

LONDON MARKET—Cluster compact, very long and heavy. Berries large, brilliant red, firm and good quality. Strong, rugged grower, well adapted to a variety of soils and climates. Less injured by leaf diseases and other currant troubles than any other variety. Originated in Michigan, where it is known as the great money-maker; enormously productive; sells well. 15c each; \$1.50 per dozen; \$10.00 per 100.

POMONA—A new variety of red currant; as reported by all experiment stations having it on trial, it outyields all others. 15c each; \$1.50 per dozen; \$10.00 per 100.

WHITE GRAPE—This is justly becoming very popular; very large, white. The very best currant known to us; sweet or very mild acid; good grower and hardy. Has been very satisfactory, and is a currant we can recommend for any purpose. Price, 15c each; \$1.50 per dozen; \$10.00 per 100.

For want of space we only name other varieties of Currants we have, viz.: Cherry, Prince Albert, North Star, Fay's Prolific, Wilder White Transparent and Versailles. 10c each; \$1.00 per dozen.

Gooseberries

As to soil, cultivation, etc., all we have said concerning the currant applies to the gooseberry. Who that is acquainted with its different uses and knows the delights of a good gooseberry pie, would ever again willingly be without this most wholesome of fruits?



HOUGHTON—Medium size, pale red, quite sweet and enormously productive. This we regard as our standby. Has the genuine gooseberry flavor. 10c each; \$1.00 per dozen; \$8.00 per 100.

DOWNING—Fruit nearly twice as large as Houghton. Flesh whitish green, soft, juicy and good. Lacks the genuine gooseberry flavor of the above. Plant vigorous; one of the best. Price, 2-year No. 1, 15c each; \$1.50 per dozen; \$12.00 per 100.

CHAMPION—About as large as Downing; enormously productive; never known to mildew; one of the very best sorts for home use or market. "I never saw a gooseberry that will compare with the Champion one year with another, and all things considered."—Prof. J. L. Budd, Iowa Horticultural Report, 1897. 2-year No. 1, 25c each; \$2.50 per dozen; \$20.00 per 100.

PORTAGE—A most promising new variety; a seedling of one of the large English varieties, but as free from the destructive mildew as the Downing. Bush a fine grower and very productive. Fruit very large, yellow when ripe, and of the finest quality. 2-year plants, 30c each; \$3.00 per dozen.

CARMAN—Another English seedling, similar in growth, productiveness and quality to Portage, but a little larger, more of a golden yellow when ripe, and more oval in shape. 2-year plants, 30c each; \$3.00 per dozen.

Rhubarb or Pie Plant

LINNAEUS—Large, early, tender and fine. 10c each; \$1.00 per dozen; \$6.00 per 100.

VICTORIA—A large variety of excellent quality. Same price as Linnaeus.

Asparagus

Asparagus is one of the earliest and finest of spring vegetables; so easy of culture, profitable and wholesome, that every family garden should have a very liberal supply. Plant in well-drained fertile soil, work it up fine and deep, and place the plants in rows four feet apart and eight inches apart in the row; spread out the roots in a trench made deep enough to permit their crowns to be covered with three or four inches of mellow soil; give the rows a liberal dressing of well-rotted manure at least once each year, and 15 pounds of salt per rod length early every spring. Do no cutting for use the first season. Any or all of the following described varieties will give entire satisfaction if managed as above.

COLUMBIAN MAMMOTH WHITE—A distinct variety of strong, vigorous growth, producing very large white shoots that in favorable weather remain white until three or four inches high, or as long as fit for use. Market gardeners and those growing for canners will find this a very profitable variety. Price, 2-year roots, 50c per dozen; 75c per 25; \$1.25 per 50; \$2.00 per 100. If wanted in larger quantities, write for special prices.

PALMETTO—A very early variety extensively grown for early markets; even regular size, of excellent quality, and considered by many as the best variety in cultivation. Prices same as above.

CONOVER'S COLOSSAL—A mammoth variety of vigorous growth; tender and excellent quality; sends up 15 to 20 sprouts each year, one inch in diameter; color deep green, and crown very close. Prices same as above.

BARR'S MAMMOTH—A variety that comes highly praised. Said to be nearly double the size, and much more productive than Conover's Colossal. Prices same as above.

DONALD'S ELMIRA and **DREER'S ECLIPSE**—2-yr. plants at above prices.

Juneberries

IMPROVED DWARF JUNE BERRY—This is one of our most wholesome fruits. Uses: A delicious fruit to eat out of hand or for pies and canning. Perfectly hardy and never fails to bear. Fruit resembles the blueberry; borne in attractive clusters; bluish black; about the size of a good big Houghton gooseberry; blossoms white. Should be in every garden. 20c each; \$1.80 per dozen.

Select Raspberries

The plan most commonly recommended for laying out the raspberry plantation is to plant in rows from six to eight feet apart and two to three or more feet in the row; but recent experience has convinced us that there is a much better plan; we now plant raspberries in hedge rows; plant one foot apart in row and rows eight feet apart. The dense hedge row smothers out all weeds in and near the row, rendering cultivation easier and quicker; keep this space between the rows well and frequently cultivated. It is a well-known fact that raspberries are always larger, finer and sweeter if grown partially in the shade; the hedge row furnishes this condition. It also stays the young canes against the wind twisting and breaking them, resulting in more and better canes, more and finer fruit, and rendering easier and quicker cultivation. Give this plan a trial, and you will soon be convinced of its advantages over the old way.

OLDER—This we consider well worthy to head the list; the greatest drouth resister among raspberries. Is among the earliest and is the largest black-cap we have any knowledge of. Ripens all its fruits perfectly. Last berries as large as the first. Has small seeds, with much pulp and rich juice, therefore the most wholesome of all raspberries. People who would not dare to use the dry, seedy varieties can use these freely. Originated in Iowa, and is of ironclad hardiness. 5c each; 50c per dozen; \$2.50 per 100; \$15.00 per 1000.

KANSAS—A large, early berry; is very large and fine. Many experiment stations have placed it at the head of the list. A very strong grower; withstands drouth splendidly, and is enormously productive. Same price as Older.

GREGG—Of great size, fine quality, very productive; has been a standby and very popular for years; several days later than Older and Kansas. No one can afford to be without it. Same price as Older.

CONRATH—At present this holds the place for best mid-season blackcap. It is of ironclad hardiness; berries large, shiny black and always good sellers. Enormously productive and a good shipper. Price, 5c each; 50c per dozen; \$2.50 per 100; \$15.00 per 1000.

CUMBERLAND—This new berry is a very valuable acquisition. Its hardiness has been proven, and will thrive anywhere that blackcaps can be grown. The quality is very similar and fully equal to Gregg. In spite of its unusual large size, the fruit is possessed of great firmness, and is thus well adapted

SELECT RASPBERRIES—Continued

for standing long shipments. It follows Palmer and Souhegan and precedes Gregg a short time, making it a mid-season variety. The bush is exceedingly healthy and vigorous, throwing up stout canes, well adapted for supporting their loads of large fruit. Price, 10c each; \$1.00 per dozen; \$4.00 per 100; \$25.00 per 1000.

Purple Cap Varieties

THE NEW CARDINAL RASPBERRY—This wonderful berry is a surprise in the fullness of its merits—its great growth, extreme hardiness and the exceeding productiveness of its choice, red, rich, pure flavored berries. It will pay. It is not a novelty, but a variety of great merit. The Cardinal is claimed to grow 10 feet high and bear in proportion. Leading horticulturists who have seen this berry say it is one of the wonders of the century, so far exceeding all others as to put it beyond comparison. Judge Wellhouse, president of the Kansas State Horticultural Society, said at the meeting of the society that the introduction of the Cardinal raspberry would add millions to the wealth of the farmers of the country, because of its inherent great vigor and exceeding productiveness. Four years' trial on our grounds has verified every claim in the above description. Price, 10c each; \$1.00 per dozen; \$5.00 per 100; \$30.00 per 1000.

HAYMAKER—An Ohio seedling of the Shaffer and Columbian type; fruit a little more acid and is later than either, prolonging the season. An enormous producer, excelling the Columbian, not so dark colored and is firmer than either of these varieties; does not crumble; stands up well in shipping; quality good, either for table or canning; produces very large crops; stands drouth or extreme cold splendidly; a close second to the Cardinal; a little larger berry, but not quite so good in cane or foliage. The last two seasons this variety has been outdoing



Cardinal

the New Cardinal, and it deserves first place. Very much superior to all others of its class. Same price as Cardinal.

Red Varieties

These are multiplied by suckers; they sprout all over the ground near them, and must be confined to narrow rows by running the plow through frequently during the growing season; properly managed they excel all other raspberries for quality and equal them in productiveness; for my part I could not think of discarding them.

KING—Pronounced the best early Red Raspberry by many leading horticulturists. Plant a strong grower, very hardy and productive. Berry is firm, a good shipper; large size; ripens with the earliest. 5c each; 50c per dozen; \$3.00 per 100.

A Certificate of Nursery Inspection, certifying that our nurseries have been examined and found to be free from all insect pests, is attached to every order that leaves our nurseries.

RED RASPBERRIES—Continued



London

LOUDON—The superior points of this excellent raspberry are vigor of growth, large fruit, beautiful rich, dark crimson color, good quality and great productiveness and hardiness, enduring our coldest winters without protection. Price, 5c each; 50c per dozen; \$3.00 per 100.

Select Blackberries



Snyder

About the same general directions will apply as for raspberry. Our plants are of regular nursery propagation; root cutting plants are worth ten-fold more to the fruit-grower than sucker plants dug from old, exhausted patches, this latter being the cause of most of the failures in attempts to produce this valuable fruit; be sure that you get genuine nursery propagated plants and you will succeed. The blackberry is naturally a stronger bush than the raspberry and should be planted in rows eight feet apart and three feet in the row. Otherwise their culture is the same as raspberries.

SNYDER—This is the old standby which succeeds anywhere a blackberry can be grown. Out of a long list of varieties we have fruited this is the only one we consider worth retaining for this locality. Extremely hardy, enormously productive, medium size, no hard, sour core; sweet and juicy. Price, 5c each; 50c per dozen; \$3.00 per 100; \$20.00 per 1000.

Dewberries

Management—Great care and peculiar treatment are necessary for successful Dewberry growing. They do best on high, well drained clay soil, but can be grown with reasonable success on almost any good soil. Plant in rows seven feet apart and four to five feet in the row. Begin pruning by pinching out the ends of the canes as soon as they reach a length of three feet and of the laterals when they reach two feet. In the fall prune away all but six of the best canes to each hill and these canes to a length of four to five feet. Press them closely to the ground lengthwise of the row and cover with three inches of forest leaves or by throwing a light furrow upon them. Uncover in spring when all danger of freezing is past and tie to a wire trellis.

Lucretia Dewberry

Claimed to be the best of the blackberry family, as productive as any. The berries are far larger and incomparably better than any blackberry, and of unequalled excellence; soft, sweet and luscious throughout, of brightest, glossy black color. The Lucretia Dewberry has received the indorsement and highest praise from the best horticulturists in the country. Its eminent success in all soils, from Maine to California, from Minnesota to Florida, is something phenomenal in small fruit culture. Its trailing habit renders it less liable to winter-kill. Price, 10c each; 75c per dozen; \$3.00 per 100; \$20.00 per 1,000.

Strawberries

No one owning a home, or for that matter having one rented for a term of years, can put a little money to better use than to buy three or four hundred plants of the standard variety of strawberry. Give them the proper care and a good sized family will hardly use all the fruit they will produce the next season after planting. Nothing will bring quicker and greater satisfaction to the planter, more keen delight to his children, or lessen the burdens of his good wife in providing for the table than a well kept strawberry bed. The best time to plant strawberries is in early spring and on fertile new soil, or old land brought to a high state of cultivation. If horses are to be used in cultivating, plant in rows three and one-half to four feet apart, and one to three feet in the row, but for hand culture, one by two feet will answer. Here is the plan we have found the most profitable and always gives large, fine fruit: Set plants as early in spring as the season will permit; pinch off all the blossom stalks which appear the first season; this throws all the strength into a good stand of new plants for the



Right Way to Plant

greater satisfaction than can possibly be obtained with plants taken from an old fruiting bed. Such plants are not worth the digging.



Wrong Way to Plant

Our plants are strictly nur-

very grown and will give far

greater satisfaction than can possibly be obtained with plants taken from an old fruiting bed. Such plants are not worth the digging.

Out of a long list of more than thirty varieties which we used to catalogue we now retain but one, **THE SENATOR DUNDAP**. Probably no other variety of any fruit was ever introduced which gave as universal satisfaction as this one. Every claim that was made for it has been more than met. Some of the claims that were made for it, and which have been tested, are:

1. A clean, healthy and vigorous plant, capable of resisting intense cold, and severe drouth, and making an abundance of good and strong plants when almost every other variety fails.

Write to us about anything you want not found in this catalog; we can furnish almost anything, at reasonable prices, that is grown by any American nurseryman.

STRAWBERRIES—Continued

2. A long-blooming season, with an abundance of pollen, making it one of the best self-fertilizers, and also the best for fertilizing pistillate varieties.
 3. A long-fruited season—coming in with the medium early, and holding out when most others are gone, developing and ripening all of its berries.
 4. Uniformly large, well-shaped, dark bright red, glossy berries, with a very large bright-green calyx. Berries of the finest quality and flavor.
 5. A good shipper with long-keeping qualities, and attractive appearance, making it more salable than most others.
 6. A good canner, retaining its bright red color in the cans.
- We obtained our breeding stock direct from the introducer. Our plants are pure, no other variety being grown upon our grounds, and the best that can be produced. Price, 25c per dozen; \$1.00 per 100; \$3.00 per 500; \$5.00 per 1,000.

Select Evergreens

The following are the best sorts of Evergreens to plant in this part of the state for shelter belts and ornament. There is nothing which will add more to the value of a farm or more comfort to the home than a well arranged plantation of Evergreens. Their shade is cool and refreshing in summer, and a belt of them is the greatest barrier against winter blasts which can be provided. Our Evergreens have been two and three times transplanted, are heavy-rooted and stocky, thrifty plants.

How to Plant and Care for Evergreens

SOIL—Any soil that will grow corn and garden vegetables is suitable for Evergreens.

PLANTING—Dig holes large, so that roots are not crowded, using top soil in bottom of hole and also arranging the roots carefully, working the fine soil around and among the roots with your hand. Shake the tree occasionally as the filling is going on, to settle the soil, at the same time raising the tree to the desired depth. When the roots are well covered, hold the tree upright and firm while you tread the soil very firmly around the tree with the feet. When this is done you have a basin or hole around the tree that will hold one-half to a pail full of water, according to size of tree. Fill this basin with water, after it is all soaked away—say in half an hour—fill the basin with good mellow soil which must be left loose and not tramped. Take your tree to place of planting well covered with wet moss and blankets, dipping each root in a barrel or bucket of water just before placing in hole.

WATERING—The month of August is the most critical time for newly planted Evergreens, for during this month, unlike deciduous trees, Evergreens make a new root growth, therefore require moisture. If rains have not been plenty the trees should be watered. Make a basin around each tree by pulling away the soil with a hoe and water exactly as described above in article No. 2. If the season is dry, this watering should commence the latter part of July; repeating every two weeks until it rains.

CULTIVATION—Good cultivation is very essential. No vegetation appreciates good cultivation better than trees, which can be done by hoe or horse cultivator, twice a week up to August 1st, when a good mulch of partly rotted hay or straw should be given. Never mulch with green manure.

SEEDLINGS—Seedling Evergreens, the largest sizes, should be planted and treated as above; small sizes should be planted in well prepared beds with dibble and shaded the first season.

WINDBREAKS—Distance apart for windbreaks: Spruce, Firs and Arbor Vitae, single row, 4 to 6 feet; double row, 10 feet. Scotch and Austrian Pines, single row, 8 feet; double row, 10 to 12 feet. White pine, single row, 8 feet; double row, 12 to 14 feet.

HEDGES—Evergreen hedge, American Arbor Vitae, sizes from 10 to 18 inches, 15 inches apart; 18 to 24 inches, 18 inches apart; 2 to 3 feet and larger, 2 feet apart. Spruce, 2 to 4 feet apart, according to size.

Descriptions

WHITE PINE—(*Pinus Strobus*)—One of the best Evergreens. Foliage is a warm light green, often with a bluish tinge. The leaves in fives, three or four inches long, soft and delicately fragrant. It does not grow so rapidly the first few years as some, but after being planted two or three years, it is the most rapid grower of all Evergreens. It accommodates itself to a great variety of soils; it is one of the best for shelter, the best large growing Evergreen to plant near buildings or along streets to be trimmed up for shade. But few, if any other trees unite so many elements of beauty and utility as our native White Pine.

SELECT EVERGREENS—Continued

PINUS PONDEROSA—(Western Bull Pine)—Heavy wooded pine, a rapid grower, forming a tree of great size. Bark reddish and foliage longer and coarser than the Red or Norway Pine. A valuable tree for the West and Northwest. Well adapted to dry, windy and exposed positions. It is a native of Western Nebraska and will do well on our light, dry sandy soil.

SCOTCH PINE—(*Pinus Sylvestris*)—A rapid growing, hardy variety, with stout, erect shoots and silvery green foliage. Valuable for shelter and makes a good lawn tree, and being one of the hardiest of the Evergreen family it readily adapts itself to the trying climate of Minnesota, the Dakotas and Montana. It also thrives well in the dry plains of Kansas, and is perfectly at home in Illinois, Nebraska, Iowa and other states.

MUGHO PINE or DWARF MOUNTAIN PINE—This unique Alpine species forms a dark dome shaped bush, broader than its height and sometimes almost prostrate. Valuable for planting lawns, terrace banks, hillsides, rockeries, etc.

BALSAM FIR—(*Picea Balsamea*)—A well-known, popular tree, very handsome while young, assuming the upright, conical form; leaves dark green above, silvery beneath; retains its color throughout the severest winter weather; grows quite rapidly when established; desirable every way.



Colorado Blue Spruce

has but about 50 degrees of moisture to 90 degrees in the Eastern states, it is necessary to have something which will endure the bright sun and drying winds of winter.

PICEA PUNGENS—(Blue Spruce, Colorado)—This Evergreen grows over a greater range of territory than any other member of the Evergreen family. Its home is in the clefts and recesses of the Rocky Mountains, growing on barren soil, exposed to the roughest of weathers. It heads the family of Spruce for hardness and longevity. The name Blue Spruce comes from its color. No description or picture can do this tree justice, as its shiny needles, together with their rich blue coloring, is the grand climax nature has arrived at in giving us something that will be a thing of beauty and a joy forever. Our grafted specimens are the brightest blue color possible to produce.

CONCOLOR FIR—(*Picea Concolor of Colorado*)

—This Evergreen is of the rarest beauty, even colored, the same the year round, a rapid grower, and will make a large tree, in this country; should be planted where it will have some protection from southwest winds and sun; this should be included in every collection.

AMERICAN WHITE SPRUCE—(*Picea Alba*)

—Pyramidal tree of dense growth, with light, silvery green foliage. A more compact tree in all respects than the Norway Spruce. One of the best for general use and very fine for lawn planting.

BLACK HILLS SPRUCE

—This is the *Picea Alba* or the White Spruce, but with this difference: That while the Norway and the Black and White Spruce will not endure the winter drouths of the Western plains, this tree seems well adapted for all the regions from which the others are excluded. Growing in a dry climate and often richly colored, it seems to meet the requirements of a vast field. While the air of the plains

SELECT EVERGREENS—Continued

NORWAY SPRUCE—(*Abies Excelsa*)—A very popular variety from Europe. It has been more extensively planted in this country than has any other Evergreen. In fact, it is so well known as being one of the best Evergreens for ornamental purposes that it is only necessary to say that it is also the most valuable for windbreaks, screens and hedges.

JUNIPER VIRGINIA RED CEDAR—A well-known American tree which varies much in habit and color of foliage. It succeeds well on the plains of Nebraska and Kansas, where other evergreens fail, and is very desirable for ornamental purposes, also for windbreaks, shelter belts and hedges.

AMERICAN ARBOR VITAE—(*Thuja Occidentalis*)—One of the finest evergreens for ornamental screens and hedges. Grows rapidly and soon forms a most beautiful hedge. It bears trimming to any extent desired and plants that have been rendered compact by clipping, retain the fresh green of their leaves in winter better than those with more open foliage. For an ornamental hedge the plants may be set 12 to 16 inches apart. For a screen to grow tall, plant about 2 feet apart.

PYRAMIDAL ARBOR VITAE—A superb, new and hardy sort, of very compact habit; much better than the Irish Juniper; grows in a perfect column; is rare and beautiful and is largely planted in cemeteries, owing to the small amount of space it occupies. This is perhaps the most valuable Arbor Vitae in cultivation.

ROCKY MOUNTAIN SILVER CEDAR—A tree of rare beauty, almost equal to Silver Spruce. Naturally assumes an upright form. Deserves a prominent position on the lawn. Coming originally from the Rocky Mountains, it is entirely hardy and well adapted to our climate.

Price List of Evergreens

PINUS STROBUS.

	Each	10	100
White Pine, 2 to 3 feet.....	\$0.40	\$3.50	\$30.00
White Pine, 3 to 4 feet.....	.50	4.50	40.00
White Pine, 18 to 24 inch.....	.30	2.50	20.00

PINUS SYLVESTRIS.

Scotch Pine, 5 to 6 feet.....	.50	4.00	35.00
Scotch Pine, 4 to 5 feet.....	.40	3.50	30.00
Scotch Pine, 18 to 24 inches.....	.20	1.75	15.00

PINUS PONDEROSA.

Bull Pine, 18 to 24 inch.....	.45	3.50	22.50
Bull Pine, 12 to 18 inch.....	.30	2.50	18.00

PINUS MONTANA.

Dwarf Mountain or Mugho Pine, 12 to 18 inch.....	.50	4.00	
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PICEA PUNGENS.

Colorado Blue Spruce, or Silver Spruce, 3 feet.....	4.50		
Colorado Blue Spruce, or Silver Spruce, 2 to 2½ feet.....	3.50		
Colorado Blue Spruce, or Silver Spruce, 18 to 24 inch.....	3.00		
Colorado Blue Spruce, grafted Silver Spruce, 12 to 18 in. 2.50			

PICEA CANADENSIS.

Black Hills Spruce, 3 feet.....	1.00	9.00	
Black Hills Spruce, 2½ feet.....	.85	7.50	
Black Hills Spruce, 2 feet.....	.65	5.50	
Black Hills Spruce, 18 to 24 inch.....	.50	4.50	

PICEA EXCELSA.

Norway Spruce, 2 to 3 feet.....	.50	4.50	30.00
Norway Spruce, 18 to 24 inch.....	.40	3.00	15.00
Norway Spruce, 12 to 18 inch.....	.30	2.50	15.00

PICEA ALBA.

White Spruce, 2 to 3 feet.....	.50	4.50	
White Spruce, 18 to 24 inch.....	.40	3.50	
White Spruce, 12 to 18 inch.....	.30	2.50	

ABIES BALSAMEA.

Balsam Fir, 3 feet.....	.75	5.00	
Balsam Fir, 2 to 3 feet.....	.50	4.00	
Balsam Fir, 18 to 24 inch.....	.40	3.00	

THUYA OCCIDENTALIS.

American Arbor Vitae, 18 to 24 inch.....	.30	2.00	15.00
American Arbor Vitae, 12 to 18 inch.....	.20	1.75	12.00

SELECT EVERGREENS—Continued

THUYA PYRAMIDALIS.

	Each	10	100
Pyramidal Arbor Vitae, 3 to 4 feet.....	1.50		
Pyramidal Arbor Vitae, 2 to 3 feet.....	1.25		
Pyramidal Arbor Vitae, 18 to 24 inch.....	.75		
Pyramidal Arbor Vitae, 12 to 18 inch.....	.60		

THUYA OCCIDENTALIS SIBERICA.

Siberian Arbor Vitae, 12 to 18 inch.....	.50		
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JUNIPERUS VIRGINIA GLAUCA.

Silver Red Cedar, 4 to 5 feet.....	.40	3.50	
Silver Red Cedar, 3 to 4 feet.....	.30	2.50	

JUNIPERUS VIRGINIA.

Red Cedar, 12 to 18 inch.....	.25	2.50	15.00
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Shade and Ornamental Trees

CAROLINA POPLAR—Pyramidal form and robust growth; leaves large, glossy, serrated, of light green color, changing to dark green. Makes a very handsome shade or street tree. Smoke and soot of large cities do not damage its foliage. Perfectly hardy. Price, 10 to 12 feet, 35c each; 8 to 10 feet, 30c each; 1 year, 2 to 3 feet, \$1.25 per dozen; 3 to 4 feet, \$1.50 per dozen.

SUGAR MAPLE, OR HARD MAPLE—One of the most beautiful shade or ornamental trees; when given plenty of room forms a fine, round, dense head. In autumn its foliage presents varying and beautiful colors as cold weather approaches, and often becomes gorgeously colored. Price, 8 to 10 feet, 50c each; 7 to 8 feet, 45c; 6 to 7 feet, 40c; 5 to 6 feet, 35c each.

NORWAY MAPLE—A handsome tree of large growth, forming a wide, round head of spreading branches and having broad, deep green leaves. Strong, compact and vigorous. One of the very best trees for street, park, or lawn. Price, 8 to 10 feet, \$1.00 each; \$3.00 per 10.

REITENBACH'S NORWAY MAPLE—Beautiful and striking because of its rich, changing foliage, which is soft green in spring, decidedly purple in mid-summer, purplish scarlet in autumn. Vigorous pyramidal, valuable for contrasts. 5 to 7 feet, \$1.00 each.

PURPLE NORWAY MAPLE—The gleaming red and purple tints of its young leaves and shoots contrast brightly with the delicate greens of spring. At maturity they are a purplish green, in autumn of pure golden tints and shades. 6 to 8 feet, \$1.50; 5 to 6 feet, \$1.25; 4 to 5 feet, \$1.00 each.

CATALPA SPECIOSA—A very hardy tree with large, tropical appearing foliage and a free bloomer, followed by long bean-like pods. Desirable for shade and street trees. Price, 8 to 10 feet, 50c; 7 to 8 feet, 40c each.

CATALPA BUNGEI—(Chinese Catalpa)—A curious dwarf that grows only eight to ten feet high and twice as broad. Top grafted on tall stems, it is quite as effective for lawn and terrace decoration as the more expensive and tender Bay trees. Grafted fine heads, 6 to 8 feet, \$1.00 each.



Norway Maple

SHADE AND ORNAMENTAL TREES—Continued.

EUROPEAN WHITE BIRCH—A rapid growing shade tree of beautiful form. Very desirable for street or lawn planting. By the time the tree is five or six years old the bark of the trunk and larger branches becomes a beautiful silvery white color. Entirely hardy in all parts of the Northwest. Makes elegant shade. Price, 8 to 10 feet, 50c; 10 to 12 feet, 60c; 7 to 8 feet, 40c; 5 to 7 feet, 35c each.

LINDEN—(Commonly called Basswood)—A very graceful and beautiful tree for planting on the lawn. Its leaves are moved with the least breath of air and show the white surface underneath. Its blossoms are delightfully fragrant, and the busy bee delights in their sweetness. Price, 7 to 8 feet, 50c; 6 to 7 feet, 40c; 5 to 6 feet, 30c; 4 to 5 feet, 25c; 3 to 4 feet, 20c; 2 to 3 feet, 15c; 1 to 2 feet, 10c.

WHITE-LEAVED LINDEN—The leaves are green above and silvery beneath. The foliage is especially pretty when tossed about by the wind. 6 to 8 feet, 75c each.

RUSSIAN OLIVE—An extremely hardy tree, with silver foliage, and the most delightfully fragrant when in bloom of anything we have a knowledge of. A small sprig taken into the house will perfume it throughout; the tree attains only medium size. Price, 5 to 6 feet, 30c; 4 to 5 feet, 25c; 3 to 4 feet, 20c.

HORSE CHESTNUT—A very popular tree for street or lawn planting. Hardy covered in early summer with magnificent spikes of flowers. Price, 5 to 6 feet, 50c each.

PIN OAK—This is considered the most beautiful of all the oaks, and is certainly the most popular for street and park planting. As the tree grows the branches droop until the lower ones touch the ground, giving it a peculiarly beautiful ovate outline. The leaves are deep green, glossy and finely divided, flaming to orange and scarlet in the fall. The avenues of Pin Oaks, in Fairmount Park, Philadelphia, are greatly admired. 6 to 7 feet, \$1.00 each; 5 to 6 feet, 75c.

CHESTNUT OAK—Native to dry situations; of tall and beautiful growth. The leaves are shaped like chestnuts. 4 to 5 feet, 75c.

BECHTEL'S DOUBLE-FLOWERING CRAB—Bears masses of double, rose-like flowers of a delicate pink color and most delightful fragrance. Blooms while quite young and as hardy as our native wild crab. 3 to 4 feet, 75c each.

MOUNTAIN ASH—(Oak leaved)—A handsome and hardy variety, with large and deeply lobed leaves, distinct and fine, covered in autumn with bright scarlet berries. Price, 5 to 6 feet, 50c each.

SYCAMORE, AMERICAN—(*Plantanus Occidentalis*)—A very rapid-growing, spreading native tree; always clean and healthy. One of the most desirable shade and street trees among our native trees. 6 to 8 feet, first class, 50c each; 4 to 5 feet, 35c each.

SALISBURIA ADIANTIFOLIA—(Ginko, Maiden Hair)—An ornamental tree, native of Japan. A very handsome, strange and striking tree; combines some of the characteristics of the evergreens and the deciduous trees. Trees of medium height, fairly rapid in growth and hardy. Its foliage resembles the Maiden Hair fern hence its name. A rare and elegant tree. 5 to 6 feet, 60c each; 6 to 8 feet, 75c.

WHITE OR AMERICAN ELM—One of the best shade or street trees. Price, 5 to 6 feet, 30c; 6 to 8 feet, 40c; 8 to 10 feet, 50c each.

SOFT MAPLE—5 to 6 feet, 25c; 6 to 8 feet, 30c; 8 to 10 feet, 35c each.

Weeping Trees

BIRCH—Cut-Leaved Weeping—Unquestionably one of the most popular of all weeping or pendulous trees. Its tall, slender, yet vigorous growth, graceful drooping branches, white bark and delicately cut foliage presents a combination of attractive characteristics rarely met with in a single tree. Perfectly hardy, as is shown by the fact that perfect, full-grown specimens are seen in Minnesota, where the mercury drops to 30 to 40 degrees below zero. Prices, 8 to 10 feet, \$1.50; 7 to 8 feet, \$1.25; 6 to 7 feet, \$1.00 each.

CAMPERDOWN WEEPING ELM—This forms one of the most picturesque drooping trees. It is of rank growth, the shoots often making a zigzag growth outward and downward of several feet in a single season. The leaves are large, dark green and glossy and cover the tree with a luxuriant mass of verdure. Price, 2-year heads, \$1.50 each; 1-year heads, \$1.25 each.

Ornamental Shrubs and Flowering Plants

LILACS, BUDDED VARIETIES—Nothing is more beautiful than a clump, hedge or screen of these, and they should go into every border. In many country dooryards the neglected lilacs continue to bloom with a fragrance and beauty that is surpassed by no other shrub. The following varieties are the most choice selections, and will give a succession of bloom for many days.

ORNAMENTAL SHRUBS AND FLOWERING PLANTS—Continued

ALPHONSE LAVALLE—Large panicles of double violet-blue flowers, 3 to 4 feet, 40c each.

BELLE DE NANCY—Double white flowers that are tinged with purple. 3 to 4 feet, 40c each.

FRAU DAMMANN—One of the best; a free bloomer, with medium sized white flowers, borne in large panicles. 3 to 4 feet, 40c each.

MME. ABEL CHATENAY—Pure white flowers in compact panicles. 3 to 4 feet, 40c each.

PRESIDENT GREVY—The individual flowers are very large and double; a beautiful blue in color. The panicles are larger than those of any other variety. 3 to 4 feet, 40c each.

SENATEUR VOLLAND—A good variety, with double rosy-red flowers. 3 to 4 feet, 40c each.

LUDWIG SPAETH—The single flowers are a very dark purple, and distinct from other kinds. 3 to 4 feet, 40c each.

LILAC—COMMON PURPLE—4 to 5 feet, 25c each.

TAMARIX—This hardy and very beautiful shrub of strong but slender upright growth, clothed with foliage as light and feathery as that of the asparagus. Its delicate fringing flowers are borne in spikes; color, a warm shade of pink or red. Very ornamental at the back of shrubbery, and desirable for decorations and boquets. 3 to 4 feet, 30c each.

SNOWBALL—A well-known shrub; produces its snowy white flowers in large balls or masses in June; for the best effect trim into a round ball-shaped bush. Price, 2 to 3 feet, 30c each.



Hydrangea Paniculata.

HYDRANGEA PANICULATA GRANDIFLORA—A fine shrub and very popular, quite hardy, easy to grow and blooms the same year they are set out. The flowers are in immense panicles, creamy white when first open, changing to pure white when fully set out and turning pink and bronze with age; blooming in August and September. The flowers will be larger and finer if given good rich soil, and the plants cut back each spring fully one-half the past season's growth. Price, 13 to 24 inches, 25c; 2 to 3 feet, 35c each. Tree form, 75c.

ORNAMENTAL TREES AND FLOWERING PLANTS—Continued.

SYRINGA OR MOCK ORANGE—One of the most desirable shrubs. Its beauty and fragrance make it a universal favorite. They grow to a height of 8 to 10 feet, and bloom profusely in the spring. Price, 2 feet, 25c each. Heavy clump, \$1.00.

SPIREAS—Low growing shrubs well adapted for hedges, shrubberies or single specimens on the lawn. Grow in almost any moderate moist soil and with very little care or attention.

ANTHONY WATERER—One of the most charming of all small shrubs, seldom growing larger than 2 to 3 feet. Its handsome trusses of deep crimson flowers are produced in great profusion from early spring until fall. Beautiful single, in clusters or as a low hedge. 18 to 24 inches, 50c each.

SPIREA VAN HOUTTEI—The grandest of the Spireas. Perfectly hardy. A strong grower and a profuse bloomer. Has a small, delicate, white blossom, borne in clusters that almost entirely cover the bush about June 1st. Very handsome, even when not in bloom. Often called Bridal Wreath. Suitable for low screens, hedges and borders. Price, 12 to 18 inches, 20c each; \$10.00 per 100; 18 to 24 inches, 25c each; \$12.00 per 100; 2 to 3 feet, 30c each; 3 to 4 feet, 40c each. Heavy clump, 75c.

CALIFORNIA PRIVET—These ideal hedge plants have such an array of good points that we can no longer spare them for hedges alone. They are moderately hardy, nearly evergreen, grow freely in all soils, have a dense, neat habit, and bloom profusely. The flowers are white, fragrant, and borne in graceful racemes or clusters through June and July. The fruits, too, are often quite showy, and the leaves are glossy. Price, 2 to 3 feet, 25c each; \$1.25 per dozen; \$10.00 per 100.

AMOR PRIVET—Some harder than the California Privet. A desirable shrub to use for ornamental hedges in this part of Iowa. 18 to 24 inches, 25c each; \$15.00 per 100.

GOLDEN GLOW—A hardy perennial plant, growing eight feet high; branching freely and bearing by the hundreds on long, graceful stems, exquisite double blossoms of the brightest golden color and as large as the Cactus Dahlia. Price, strong roots, 25c each.

YUCCA FILAMENTOSA—An interesting and tropical appearing plant which will endure any of our Northern winters and is therefore valuable for those localities where flowering plants are scarce. It is an evergreen perennial, throwing up in the middle of the summer flower stalks three feet in height, bearing a profusion of creamy white, bell-shaped blossoms. One of the most beautiful plants for the lawn. Price, 2-year plants, 50c each.

Climbing Vines

TRUMPET FLOWER—A splendid vine, vigorous and hardy, and a very rapid grower, well adapted for covering unsightly objects. The flowers are magnificent, being fully 4 to 5 inches long and in clusters. Price, 25c each.

WISTARIA—(Chinese)—A most beautiful climber of rapid growth, when well established growing at rate of 15 or 20 feet in a season, and producing long, pendulous clusters of pale blue flowers, resembling in size and shape a bunch of grapes; sometimes gives a second crop of flowers in the fall. Price, 2-year plants, 50c each.

Clematis Vines

CLEMATIS PANICULATA—This wonderful flower blooms in September. It is one of the finest of hardy climbers, with handsome foliage, of very vigorous, rapid growth, and produces in late summer dense sheets of medium sized pure white flowers of the most pleasing fragrance. Each branchlet is thickly set with these showy flowers and altogether produce a most gorgeous sight. This is a new Japanese plant and perfectly hardy and finely adapted to use for any covering purpose. Price, strong field-grown, 50c each.

JACKMANII—This is perhaps the best known of the newer fine perpetual Clematis, and should have credit of the great popularity now attending this family of beautiful climbers. The plant is free in its form of growth and an abundant and successional bloomer, producing flowers until frozen up. The flowers are large, of an intense violet purple, remarkable for its velvety richness. The Jackmanii has no superior. July to October. Price, strong field-grown, 75c each.

MADAME EDOURARD ANDRE—(The Red Clematis)—An entirely distinct and most novel variety, and the nearest approach to a bright red ever sent out. The plant is a strong, vigorous grower, being a hybrid of the popular Jackmanii, which it resembles in freedom of bloom, strong, vigorous growth and shape and size of flower, but is a distinct carmine red color of a most pleasing shape, entirely different from all other varieties. Price, strong field-grown, 75c each.

CLIMBING VINES—Continued

HENRY VII—The best and most popular of all the white varieties. Fine, large, creamy-white flowers. A strong grower and very hardy; a perpetual bloomer. Price, strong field-grown, 75c each.

*Clematis Paniculata*

Roses

Rose bushes should be planted one or two inches deeper than they stood in the nursery and the tops should be cut back to about three inches of the ground, then if you want to see them get up and grow as if they meant it, give them a mulching of manure from the horse stable. Spray with Bordeaux for mildew and any of the arsenicals for insects.

Climbers

CRIMSON RAMBLER—This rose is unquestionably an acquisition, a novelty of high order, and most distinct in its characteristics. It is a running or climbing rose of vigorous habit, strong and rapid grower, with handsome, shining foliage and produces in marvelous abundance clusters of the brightest crimson semi-double roses. Its clustered form, its brilliancy, the abundance of its bloom, and the great length of time the flowers remain on the plant without falling or losing their brilliancy are qualities which will make this new claimant for admiration an assured favorite. For verandas, walls, pillars and fences, it is a most suitable plant. Price, 2-year blooming plants, 50c each.

PRAIRIE QUEEN—The well-known climber. Flower double, beautiful pink, fading to nearly white. Price, 2-year, blooming plants, 35c each.

ROSES—Continued.

PERSIAN YELLOW—Perfectly hardy climber. Brightest yellow of all roses, produces a great abundance of medium sized flowers in June. Price, 2-year, No. 1, 50c each.

Half Climbers

GREVILLE, or SEVEN SISTERS—Blooms in large clusters, with flowers varying from white to crimson. Luxuriant dark green foliage; perfectly hardy. Price, 2-year blooming plants, 35c each.

BALTIMORE BELLE—Pale bluish, shading to rose color, very double, flowers in beautiful clusters, the whole plant appearing a perfect mass of bloom. One of the best climbing roses, but must be protected in winter. Price, 2-year blooming plants, 35c each.

Hybrid Perpetual Roses

BABY RAMBLER—The new rose; really a dwarf Crimson Rambler. This rose is a true perpetual bloomer, perfectly hardy, free from insects and diseases, and of easy culture. The most wonderful rose ever grown. A mass of bloom every day from May until frost. It is bound to take place of soft plants for bedding, is incomparable for edging walks and driveways, for park and cemetery use, for house culture, etc. Its popularity will be greater than that of its parent, the Crimson Rambler. Price, 2-year field-grown, 75c each.

**Paul Neyron**

ULRICH BRUNER—(Hybrid Perpetual)—Raised from Paul Neyron. Brilliant cherry red; a very effective color; flowers of fine form carried well upon the plant, petals of great substance, plant vigorous, hardy and resists mildew. One of the best varieties for forcing and open air culture. Two-year field-grown, 50c each.

HYBRID PERPETUAL ROSES—Continued.

FRAU KARL DRUSCHKI—A pure, paper white, free flowering, large sized Hybrid Perpetual. It is a remarkably handsome plant with bright, heavy foliage, and strong, upright growth. The bloom is perfect in form, on fine long stems, and of the purest possible white. There is nothing in the line of perfectly hardy roses that can compare with this one in form, color and general finish. Two-year field-grown, 50c each.

MADAME PLANTIER—Pure white; produced in great abundance early in the season. One of the best of the hardy white roses. Price, 2-year blooming plants, 35c each.

HARRISON YELLOW—Now we have it, a very fine bright yellow double rose; hardy and a profuse bloomer. Two-year plants ready to bloom, 50c each.



General Jacqueminot

GENERAL JACQUEMINOT—This might be called the rose for the million, for it is still a universal favorite. Bright crimson scarlet, exceedingly rich and velvety. Grown more extensively than any other rose. Price, 2-year-old blooming plants, 35c each.

PAUL NEYRON—Flowers of immense size, often 5 inches in diameter; color deep, clear rose, very fresh and pretty. The plant is a strong, healthy grower, with clean, glossy foliage and one of the most constant and prolific bloomers in the hybrid class; young plants in nursery rows bloom almost without intermission from June to late October. Price, 2-year blooming plants, 35c each.

PRINCE CAMILLE DE ROHAN—Deep velvety crimson, very dark, almost black, darkest of all; very large, moderately full; a splendid rose, the best of its kind. By all means include this in your collection. Price, strong blooming size, 2-year, 50c each.

LA FRANCE—This is deservedly the most popular rose in cultivation. Both buds and flowers of lovely form and grand size, exceedingly sweet; color fine peach blossom, elegantly clouded with rosy flesh. Begins to bloom early and continues bearing a great profusion of buds and flowers until stopped by freezing weather. Price, strong field-grown, blooming size, each, 50c.

Moss Roses

GLORY OF MOSSES—Pale rose, very heavily mossed; one of the best. Price, 2-year blooming plants, 35c each.

LUXEMBOURG MOSS—Large cupped and a very fine rose. A luxuriant grower and free bloomer. Price, 2-year blooming plants, 35c each.

Double Herbaceous Paeonies



The Herbaceous Paeonies have always held an important place among hardy plants, and with the wonderful improvements made during recent years have established themselves among the leaders for popular favor.

Their requirements are so simple, a good, rich, deep soil and an open, sunny position, if possible, which, however, is not absolutely necessary, as they thrive almost equally as well in a partially shaded position, and a liberal supply of water through their growing season, being sufficient to give an abundance and wealth of flowers which rival the finest roses in coloring and fragrance, and produce during their flowering season a gorgeous effect not equalled by any other flower.

We have during the past season feasted our eyes on the glowing splendors and inhaled the delicate fragrance of many varieties in full bloom.

Why these beautiful and fragrant flowers have been neglected so long is owing to the fact that people are not acquainted with them. You need only to see them and you acknowledge their excellence. They are the flowers that never fail; they are hardy in the frozen north and in the sunny south, requiring no protection whatever; and once planted take care of themselves, increasing in size and beauty each year. Truly a plant for everybody.

Plant in the fall, if possible, or very early in the spring. It is cruel to send for them when leaved out. Plant in September, and in November they will have rootlets as long as your finger. Have the ground rich and spade it two feet deep. Plant your roots with the crowns about three inches below the surface, and keep out the weeds, and you can let them stand five years. We take pleasure in being able to offer our friends the following very choice list at reasonable prices. They are strong divided roots, and few of them will fail to bloom the first season after setting.

A hedge of Paeonies is a most beautiful ornament, and a joy never to be forgotten. Will make special prices on collections for hedges. Please write if interested.

TECUMSEH—Deep red; largest and solidest of all paeonies; extra rare and a grand flower. Each, \$1.50.

PLUTARCH—A satin crimson; exceedingly brilliant, and striking, with pond lily fragrance; a very charming flower. Each, \$1.00.

L. ESPERANCE—Is among the finest France has given us. It is in the Diamond list, which marks the very best in the collection of a leading French

DOUBLE HERBACEOUS PAEONIES—Continued.

florist. It stands in the front rank also of M. Koster of Holland. They are fine prolific bloomers, vivid rose color, compact in form, early bloomers, making them valuable for cut flowers and decorations. They are highly perfumed, very vigorous and multiply rapidly. These can now be had at so reasonable a rate that they should be in every collection. Price, 50c each.

ANDRE LARUES—Is deep, bright red, very double, a grand flower, and it loves deep, rich soil. Price, 25c each.

MARIE LEMOINE—This flower fills all the requirements we demand of our favorites. It is as sweet as a rose. It opens slightly yellow, then fades to purest white. It is a wholesale bloomer, a very winsome and attractive flower. Never leave this out of your collection. Price, 50c each.

FRANCOISO ORETGAL—Is of French origin. It is very brilliant crimson, giving us a blaze of splendor, so deep as to verge on the purple. It is a vigorous and striking flower with a delightful, spicy fragrance. No collection can be full without it. Price, 50c each.

RUBRA TRIUMPHANS—Has flowers of brilliant glowing crimson. They are also sweet-scented. They do not bloom as soon as some others. The plants seem to require age. Just wait. Give them a chance and they will more than make up for lost time. Price, 25c each.

GRANDIFLORA RUBRA—Is a very king among flowers. It is one of the latest. It seems to hold itself in reserve, gathering strength to put forth an exhibition of splendor. The flowers are of immense size, intense and glowing with effulgence. Massive and grand it brings up the rear of this great army of paeonies 2,000 strong. You look at them and think the best has been reserved till the last, and yet it is hard to call any one the best in this great procession which has during the season passed before us. Price, 30c each.

RICHARDSON'S RUBRA—Deep crimson, with purple shading; a grand, fragrant, full-orbed flower. Price, 75c each.

FESTIVA MAXIMA—It is a large ball of white, with center petals dashed with red; my special favorite for a white flower. Price, \$1.00 each.

AGNES MARY KELWAY—Sweetly fragrant, light rose guard, yellow petaloids, with rose tuft; a most lovely flower. Price, 50c each.

GRANDIFLORA ROSEA—Is a host in itself. The outer and center petals are red. It is slightly fragrant; a prolific bloomer; robust and vigorous. Price, 35c each.

VICTORIA TRICOLOR—Is one of the most vigorous and prolific bloomers we have. Fragrant, though the flowers cannot rank among the finest, yet is very desirable. Price, 25c each.

THE BRIDE—A small, delicate, sweet flower; winsome, attractive and well-named. Price, 40c each.

GRANDIFLORA CARNEA PLENA—Full-orbed, robust and grand; packed solid with its lovely pink petals; a charming flower of medium season. Price, 40c each.

MAGNIFICA—Large, delicate and fragrant; red, turning to pink. Each, 35c.

THE QUEEN—Single, large white, with cushion of pure gold; price, 35c.

GOLDEN HARVEST—Worthy a place in the front rank; it is sweet in fragrance, full bloomer, and better than many costly foreigners. Price, 75c each.

REEVES—Immense flower, free bloomer; light rosy pink, center petals splashed with red. Price, 30c each.

MADAME CHAUMY—Is a late pink; perfect in form and very fragrant; would do best in partial shade, as its buds are a little sensitive of the direct rays of the sun. Price, 30c each.

FRAGRANS—An excellent variety; late; deep red. Price, 20c each.

ALBA SULPHUREA—This is a fine flower and a favorite. Price, 25c each.

POTTSII—A splendid flower, deep crimson. Price, 30c each.

Miscellaneous

RAFFIA—Best Madagascar, for tying buds. Price, per lb., 15c; 10 lbs., 12c per lb.

GRAFTING THREAD—Unwaxed, at 10c per ball.

GRAFTING THREAD—Waxed, at 15c per ball.

If by mail, add 2 cents per ball for unwaxed and 7 cents per ball for waxed.

MISCELLANEOUS—Continued.

GRAFTING KNIVES—Hand forged, razor steel, 40c each; 45c by mail.

BUDDING KNIVES—Ebony handle, bone tip for raising bark, finest razor steel, 75c each; add 5c for postage.

PRUNING SHEARS—Best made, \$1.25 each; \$1.35 by mail.

BEEES, QUEENS, HONEY—Write for prices.

IN OUR HOT HOUSE we grow a general line of Garden and Vegetable Plants for early planting, including Cabbage, Tomato, Cauliflower, Egg Plant, Pepper, Celery and Sweet Potato. Prices sent on application.

ROOT GRAFTS—We have a large stock of most kinds of fruit tree seedlings, and will be prepared to put up first-class root grafts of almost everything mentioned in this catalogue. Send list of grafts wanted, and we will make the price right.

Fruit Trees Seedlings for Grafting

	Per 100	Per 1000
Apple Seedlings, 3-16 inch, and up, straight.....	\$1.00	\$ 7.50
Plum, native seedlings, 3-16 inch and up.....	1.50	12.00
Plum, native seedlings, 2-16 to 3-16 inch.....	1.25	10.00
Plum, native seedlings, under 2-16 inch.....	1.00	8.00
Pear, French Seedlings, No. 1, 3-16 and up.....	1.50	10.00



Elm

Forest Tree Seedlings

These are just the thing for starting hedges, screens, windbreaks and timber plantations. If wanted in large quantities, write for special prices.

No matter how valuable the land every farmer can make a wood lot profitable. It can constitute the windbreak and at the same time furnish posts and repair material and fuel. There is much land along streams which might be planted to trees and would become very valuable instead of furnishing only poor pasture as it does now. The time is soon coming when good timber will be in great demand in this state. Where planted for groves cultivated crops may be planted between the rows for several years. The land may be planted to corn and a seedling planted in the place of every alternate hill. In this way the seedlings will get the necessary cultivation.

Per 100		Per 100	
Ash, American, 6 to 12 in.....	\$1.00	Elm, White, 18 to 24 in.....	2.00
Ash, American, 12 to 18 in.....	1.25	Elm, White, 12 to 18 in.....	1.75
Box Elder, 4 to 6 in.....	1.00	Elm, White, 6 to 12 in.....	1.50
Box Elder, 6 to 12 in.....	1.25	European Larch, 6 to 12 in.....	3.00
Box Elder, 12 to 18 in.....	1.50	European Larch, 12 to 15 in.....	5.00
Catalpa, Hardy, 6 to 12 in.....	1.00	Mulberry, Russian, 6 to 12 in.....	.50
Catalpa, Hardy, 12 to 18 in.....	1.25	Mulberry, Russian, 12 to 18 in.....	.75
Catalpa, Hardy, 18 to 24 in.....	1.50	Mulberry, Russian, 18 to 24 in.....	1.00
Catalpa, Hardy, 2 to 3 feet.....	1.75	Osage Orange, 6 to 12 in.....	.50
Elm, White, 6 to 12 in.....	1.50	Osage Orange, 12 to 18 in.....	.75
Elm, White, 12 to 18 in.....	1.75	Soft Maple, 6 to 12 in.....	.60
Honey Locust, 4 to 8 in.....	1.00	Soft Maple, 12 to 18 in.....	.75
Honey Locust, 8 to 12 in.....	1.25	Soft Maple, 18 to 24 in.....	1.00
Honey Locust, 12 to 15 in.....	1.50	Walnut, Black, 12 to 18 in.....	1.50
		Walnut, Black, 18 to 24 in.....	2.00

SOFT MAPLE—A very rapid growing tree, valuable for fuel and windbreaks. Plant 8 by 8 or 6 by 8 feet. Maple groves have yielded over \$10.00 per acre net annual returns at about 25 years after planting.

CATALPA SPECIOSA, or HARDY CATALPA—We grow these from seed gathered from native grown trees and know them to be of the hardy sort. Catalpa is one of the most valuable trees for posts and poles, a very rapid grower, reproduces very quickly from the stump and the wood is one of the most durable in the soil. Plant 8 by 8 in deep rich soil, let grow for two years then cut back to the ground and train up one sprout for straight thrifty bodies. They require good cultivation for several years.

EUROPEAN LARCH—Has produced higher annual net returns than any other tree in Iowa. It makes durable posts and poles and good fuel. Plant 6 by 4 feet in any good land not excessively wet. It starts to grow very early in the spring, consequently we will send these out by express before our regular deliveries.

HONEY LOCUST—The most valuable two-purpose tree. It produces excellent posts and the best of fuel and is one of the most rapid growers. It is unexcelled for windbreaks and makes an excellent hedge which will stand severe pruning.

Spraying Formulas

Insecticide for Biting Insects

ARSENIC, SODA AND LIME.

White arsenic	1 pound
Sal-soda crystals	4 pounds
Water	2 gallons

Boil the above ingredients for fifteen to twenty minutes, when the arsenic should be dissolved, leaving only a little sediment. This stock solution may be kept indefinitely, but should be labeled "poison."

To prepare the spraying mixture add 1 quart of the stock solution to 40 gallons of water in which 2 pounds of fresh lime have been dissolved.

In employing these formulas use great care. The pots and utensils used in preparing the solution should not be employed for other purposes. The arsenic should be plainly labeled, lest it be mistaken for something else.

PARIS GREEN.

Paris green	1 pound
Lime (fresh)	1 pound
Water	100 to 200 gallons

LEAD ARSENATE.

Lead Acetate (sugar of lead)	12½ ounces
Sodium Arsenate	5 ounces
Water	50 gallons

Pulverize and dissolve the acetate and arsenate separately in small quantities of water, pour together in barrel of water and stir thoroughly. This

SPRAYING FORMULAS—Insecticides for Biting Insects—Continued.

while more expensive than Paris green, has the advantage of being more adhesive and less liable to burn foliage. A prepared form of this is sold in the trade under the name "Disparene."

ARSENITE OF LIME.

White Arsenic	2 ounces
Sal-soda	$\frac{1}{2}$ pound
Fresh Lime	4 pounds
Water	50 gallons

Boil the arsenic and soda together in a small quantity of water till the arsenic is dissolved, slake the lime, strain and add to the barrel of water; then add the soda and arsenic solution and stir for a few minutes.

HELLEBORE.

White Hellebore	1 ounce
Water	2 gallons

Or to be dusted undiluted on attacked plants.

Insecticides for Sucking Insects**KEROSENE EMULSION.**

Kerosene (coal oil)	2 gallons
Rain water	1 gallon
Soap	$\frac{1}{2}$ pound

Dissolve soap in water by boiling; take from fire and while hot turn in kerosene and churn briskly for 5 minutes. To be diluted before using, with 9 parts water, for scale, insects and all sucking insects.

TOBACCO INFUSION.

Tobacco (waste stems)	1 pound
Boiling Water	4 gallons

Add hot water to tobacco and let stand until cold. Strain and add 1 lb. of whale oil soap or 2 lbs. of soft soap to each 50 gallons of infusion. For aphids.

PYRETHRUM, OR INSECT POWDER.

Pyrethrum Powder	1 ounce
Water	3 gallons

For Dry Application—Mix thoroughly one part by weight of insect powder with 4 of cheap flour and keep in a closed vessel for 24 hours before dusting over plants attacked.

SULPHUR-LIME-SALT MIXTURE.

Quicklime (fresh)	15 pounds
Sulphur	15 pounds
Salt	15 pounds

Place lime in kettle; add sufficient water to slake and stir in sulphur while slaking. Boil until dissolved, an hour or more. Add salt and boil 15 minutes longer. Add sufficient water to make 50 gallons and apply while warm. **Apply only to dormant trees.**

Fungicides**BORDEAUX MIXTURE.**

Copper Sulphate	4 pounds
Quicklime (not air slaked)	4 pounds
Water (one barrel)	40 to 50 gallons

Dissolve the copper sulphate (blue stone) by suspending it in a wooden vessel containing four or five gallons of hot water. Slack the lime in another vessel. The slacking should be done slowly, otherwise it is apt to be granular. Pour the copper sulphate solution into the barrel after it has become cooled. Half fill the barrel with water, add the slaked lime, fill the barrel with water and stir thoroughly. It is advisable to strain the lime through a coarse sack or sieve. Never add the lime until ready to use.

Stock solutions of dissolved copper sulphate and lime may be prepared and kept in ~~separate~~ covered barrels throughout the spraying season. The proportions of blue stone, lime and water should be carefully entered.

FUNGICIDES—BORDEAUX MIXTURE—Continued.**DILUTE BORDEAUX MIXTURE.**

This mixture is made exactly as the above with the exception that only 2 pounds of copper sulphate and 2 pounds of lime are used to each barrel of water. This mixture should be used for trees having a tender foliage, such as the peach and Japanese plum.

BORDEAUX MIXTURE TEST.

The quantity of lime required in Bordeaux Mixture varies considerably with the quality of rock from which it is made. For this reason it is advisable to test each lot of the Bordeaux mixture after it is made up.

To ascertain if sufficient lime has been added, place a small quantity of the Bordeaux Mixture in a saucer and add two or three drops of the prussiate of potash. If this changes the Bordeaux Mixture to a reddish brown color, there is **not enough lime** present; add more lime water and test again.

The prussiate of potash may be obtained at any drug store in the crystallized form. The stock solution for the entire season may be prepared by adding just enough water to dissolve the crystals. Only a drop or two is required for each test and ten or fifteen cents worth is ample for the entire season.

COMBINATION OF FUNGICIDE AND INSECTICIDE.

When spraying for a fungous disease except when plants are in the dormant state, an arsenical mixture may be added to the Bordeaux to advantage and the spraying will be effective against the biting insects as well as plant diseases. To the Bordeaux add the usual amount of Paris green, lead arsenite or arsenite of lime, letting the Bordeaux answer for the specified amount of water.

AMMONICAL COPPER CARBONATE.

Copper Carbonate	5 ounces
Ammonia	3 quarts
Water (one barrel)	40 to 50 gallons

Dissolve the copper carbonate in the ammonia. The ammonia and concentrated solution may be kept in glass or stone jars tightly corked. When ready for use, dilute with water. This is a clear fungicide and is convenient to use when Bordeaux Mixture would stain the fruit.

POTASSIUM SULFID (Liver of Sulphur.)

Dissolve two ounces in six gallons of water and apply at once. This mixture deteriorates rapidly and should not be prepared until ready for application. This is an effective spray for mildew on gooseberries and currants.

CORROSIVE SUBLIMATE.

For potato scab soak the tubers for 1½ hours in a solution of 2 ounces of corrosive sublimate in 16 gallons of water. When dry cut up for planting.

Corrosive sublimate is a fatal poison if taken internally. It also corrodes metals. The solution should therefore be made in wooden vessels. All treated seed should be planted, and any solution left over should be poured in the ground.

FORMALINE—Used Also for Potato Scab.

Soak tubers for 2 hours in a solution of commercial formaline, 8 oz. (40 per cent solution) in 15 gallons of water.

DUST SPRAYS.

Insecticides or fungicides may be used in dust form and applied by a dust spray machine. They should be applied with slaked lime, land plaster or some other perfectly dry powder. Use Paris green and other arsenites at the rate of 1 lb. to 10 lbs. of the dry powder. Bordeaux may be made in the usual way and water evaporated and residue pulverized and applied dry.

A certificate of nursery inspection, certifying that our nurseries have been examined and found to be free from all insects, is attached to every order.

Beautify your home; increase your profits; plant Snyder's Trees.

We wish to emphasize this fact, the soil cannot be too well prepared. Plow thoroughly and cultivate frequently.

SPRAYING CALENDAR

PLANTS	Disease or Insect.	1st Application.	2d Application.	3d Application	4th Application.
Regular Spraying		Before petals open.	After petals fall.	A week or ten days later.	
	Apple scab and leaf spot Apple curculio. Plum curculio. Canker worm.	Bordeaux mixture. Lead arsenite "double strength" in the Bordeaux.	Repeat.	Repeat.	
APPLES	Codling moth.		An arsenite in the Bordeaux.	Repeat.	Repeat.
Special Spraying	Apple aphls.	Tobacco infusion or kerosene emulsion when they appear			
	All leaf eating insects.	An arsenite when they appear.			
	Scurfy scale. Oyster-shell scale	Kerosene emulsion ust after young hatch in late May or early June. Lime-sulphur wash in late winter.			
PEAR	Scab, leaf spot and leaf blight.	Bordeaux before buds start.	Just after blossom fall.	Repeat.	If foliage is eaten by insects add an arsenite to second and third sprays.
PEACH	Leaf curl and brown rot.	Bordeaux before leaves open.	Bordeaux (dilute solution) just after blossoms drop.	Bordeaux (dilute solution) 10 to 15 days later.	
CHERRY	Leaf spot.	Bordeaux.	Repeat.	Two weeks later.	Ammonical copper carbonate after fruit is full grown if necessary.
	Plum curculio.	Lead arsenate "double strength" in the Bordeaux.	Repeat.	Repeat.	
	Cherry aphls.	Tobacco infusion, kerosene emulsion or whale oil soap when they appear.			
PLUM	Cherry slug.	An arsenite when they appear.			
	Plum curculio.	Lead arsenate "double strength" in the Bordeaux.	Repeat.	Repeat.	
	Plum aphls.	Tobacco infusion, kerosene emulsion or whale oil soap when they appear.			
	Shot hole fungus. Brown rot (destroy diseased specimens in autumn).	Bordeaux before blossoms open (dilute for Japanese).	Bordeaux just after blossoms have fallen.	Bordeaux (dilute solution) 10 to 15 days later.	Ammonical copper carbonate before fruit ripens, if rot threatens.
CURRANT & GOOSEBERRY	Currant worm.	An arsenite when worms appear, repeat if necessary.			
STRAWBERRY	Mildew.	When growth begins with potassium sulphide.	Repeat as necessary.		
	Leaf-roller.	Lead arsenate "double strength" when they appear, repeat every week if necessary.			
	Rust.	Bordeaux when growth begins in spring.	Bordeaux just after blossoms fall.		
Raspberry, Blackberry, Dewberry.	Anthraxnose and rust.	Bordeaux before buds burst.	Bordeaux just after blossoms fall.		
GRAPE	Mildew and rot.	Bordeaux when leaves are half grown.	When fruit has set.		
MELONS	Striped Beetle and anthracnose	Bordeaux mixture repeated every few days. Plant decoy crop of very early squash around field and spray it with arsenate of lead when beetles appear.			
CUCUMBERS	Blight.	Slacked lime dusted on heavily. Keep plants coated with Bordeaux after first indications.			
	Aphls.	Tobacco infusion, kerosene emulsion or whale oil soap when they appear.			
CABBAGE	Caterpillars.	An arsenical solution in resin lime mixture as soon as they appear; repeat every 10 days; or an arsenate in dust form as soon as they appear; repeat every 10 days.			
	Aphls.	Tobacco infusion, kerosene emulsion or whale oil soap when they appear.			
POTATO	Colorado potato beetles. Blister beetles.	An arsenical solution in Bordeaux if that is used, as soon as they appear; repeat every 10 days if necessary.			
	Scab.	Soak the tubers in 40 per cent formalin solution at rate of 1 pint to 30 gallons of water, for 2 hours before planting, by suspending them in a coarse sack.			
	Blight and rot.	Bordeaux at first indication of disease.	At intervals of 10 days, as long as disease persists.		

LINN COUNTY NURSERIES

CENTER POINT, IOWA

FORWARD TO

Name of State.....

Total - - - \$.....

SUBSTITUTION—It frequently occurs that special varieties ordered have been in great demand and the stock has been exhausted. In such cases we **WILL NOT SUBSTITUTE UNLESS YOU ASK US TO**, but your money will be returned. If you want us to send the next best, we will. Shall we substitute or not? **Yes or No?**

[illegible]

WEAR OFF ON THIS DOTTED LINE.

ORDER SHEET—Continued

[illegible]

Please give names and addresses of a few friends who are interested in fruit growing.

[illegible]

